Directional adverbs and the encoding of path in Danish - a diachronic perspective

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Plenary lectures

Formal Semantics/Pragmatics and grammaticalization paths

Ashwini Deo (University of Yale)

It is a well-established fact that meanings associated with functional linguistic expressions evolve in systematic ways across time. But we have little precise understanding of why and how this happens. We know even less about how formal approachesto the meanings of functional categories like tense, aspect, negation can be reconciled with the typologically robust findings of grammaticalization research. In this talk, I will deconstruct the notion of a grammaticalization path and illustrate (using examples from the aspectual domain) how a theory of semantic change, built on insights from formal semantics and pragmatics, can sharpen our understanding of the clusters of discrete (but connected) phenomena that such paths consist of.

Perfecting the Notion of Sprachbund: Perfects and Resultatives in the "Stratified Convergence Zones" of Europe

Bridget Drinka (University of Texas, Sanantonio)

Considerable controversy has arisen recently concerning the validity of the notion of the Sprachbund: Campbell (2006: 2) declares that "linguistic areas boil down merely to a study of local linguistic borrowing and its history, and little else"; Stolz (2006: 36; 45) concludes that Sprachbünde are "projections from the minds of linguists." Should we, then, as Stolz (2006: 46) recommends, "either strip the term of its unwelcome and much too suggestive connotations or abolish it for good"? Or is there still reason to retain the notion as a descriptor of a real phenomenon? The present paper argues that there is, indeed, value in preserving the concept of the linguistic area, but that it will require substantial updating. What is proposed here is a more dynamic, three-dimensional depiction of the linguistic area, as embodied in the concept of a "Stratified Convergence Zone." In order to assess the usefulness of this redefined notion of the Sprachbund, we will examine evidence from the periphrastic perfects and resultatives of three proposed Sprachbünde—the Balkan Sprachbund, the Charlemagne Sprachbund, and the Peipus-Bund of the Circum-Baltic area—to discover what such an updating would entail.

BALKAN SPRACHBUND: Among the many morphosyntactic features shared by the languages of the Balkan Peninsula, the HAVE perfect represents one of the best-attested. The complex history of the area, with its many invasions, migrations, and religious conversions, is reflected in the overlapping layers of development of the periphrastic perfects. The Byzantine Empire and the Greek

Orthodox Church provided the suprastratal template of Greek, but even as this "roof" continued to serve as a model for replication especially in formal registers, innovations were being introduced from elsewhere, one change being laid down upon another:

I Slavic migrations into the Balkan peninsula in the 6th century brought the perfect construction BE + active l-participle

II The Crusades and the Late Byzantine Empire established the BE / HAVE + PPP construction based on the Romance model

III The Ottoman Empire introduced an indirective interpretation to the Balkan perfects, based on a Turkic model

IV The western European trend of interpreting the perfect as a preterite was introduced in some contiguous varieties, and several Modern Greek innovations spread to surrounding languages and dialects

This stratification of innovations resulted not in a tidy bundle of shared features but in a panoply of ragged-edged isoglosses, the micro-level responses of individuals and communities to macrohistorical processes (Gal 1989). An accurate mapping of this area needs to recognize not only the "roofing" effects of Greek, Old Church Slavonic, and Turkish but also the chronological layering and variable geographical diffusion of other innovations. The notion of "Stratified Convergence Zone" better captures the dynamic nature of this complex linguistic area than a simple, homogenous characterization of the area as a "Sprachbund."

CHARLEMAGNE SPRACHBUND: Proposed by van der Auwera (1998) in recognition of the large number of similar features to be found in French, German, Dutch, and northern Italian—the original territory ruled by Charlemagne—the Charlemagne Sprachbund, like the Balkan Sprachbund, illustrates the role of "roofing" by Latin, and likewise demonstrates the need for a stratification of the layers of innovation across time. By charting the distribution of HAVE and BE auxiliaries on the map of Europe, and then stacking these maps to represent three distinct stages, we obtain a stratified, three-dimensional view of how this multi-faceted linguistic area developed:

I The widespread use of the HAVE perfect across western Europe represents the diffusion of the Latin habeo construction, inherited in Romance, calqued into Germanic.

II Within the HAVE area, a division of labor between HAVE and BE auxiliaries later developed, corresponding to the increased use of deponents seen in Carolingian documents; the boundaries of the distribution of HAVE / BE perfects coincides precisely with the boundaries of the Carolingian realm (Drinka 2013; Drinka forthcoming).

III Within the HAVE / BE area, anteriors began to take on preterital value. First witnessed in the vernacular of twelfth-century Paris and its environs, it spread to areas influenced by French culture, such as western and southern Germany and northern Italy, and eventually into contiguous areas such as the Slavic territories under the rule of the Habsburgs.

The boundaries of Stage II and III do not coincide exactly because the center of influence shifted over time. Sociolinguistic pressures will foster the sharing of features during times of intense interaction, but centers of influence will relocate when these pressures change.

PEIPUS-BUND: The languages of the Circum-Baltic area share a complex array of features not due to genetic relationship or typological similarity but to long-term, persistent language contact among contiguous languages (Stolz 1991; Nau 1996; Koptjevskaja-Tamm and Wälchli 2001). The

spread of possessive resultatives in the Circum-Baltic region again illustrates the crucial role of stratification, as witnessed by the two-stage development of this structure in the Peipus-Bund (Décsy 1973) of Estonian, Latvian, and Livonian, as well as in neighboring N. Russian:

I Possessive structures developed based on the Baltic Finnic model of oblique possessor + BE.

II These possessive structures were used to build possessive resultatives, calqued on the model of the Low German HAVE perfect.

What this process represents, then, is the outcome of two separate, superimposed contact events: the first with Baltic Finnic, the second with the Hanseatic League (Timberlake 1976; Lindström and Tragel 2010).

The two-dimensional image of a Sprachbund only succeeds in presenting the end product of these complex changes, in synchronic fashion, but does not account for the sources of these similarities. Only a three-dimensional, chronologically-stratified model can adequately represent such a development. It is this image of a dynamic Sprachbund, reformulated as a "Stratified Convergence Zone", which is proposed here.

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Quantitative methods in historical linguistics: an emerging synthesis

Michael Dunn (University of Uppsala)

From the end of the 1950s the predominant quantitative tool in the historical linguistic toolbox was the lexicostatistical method. But while the method had pragmatic appeal, it fell into disrepute by the 1970s as it became clear that the fundamental problems of the method could not be overcome. The manifest failure of glottochronology to produce realistic results only dragged it further down. From 2000 a new set of quantitative methods began to be seen in linguistics. The tools for studying biological evolution were in a period of rapid development as methodologists rushed to exploit new possibilities brought about by advances in gene sequencing and desktop computing. The initial reception of these methods was cool, but warmed as linguists became accustomed to the new methods and began to appreciate some of the new possibilities for understanding language history that were being opened up. Today, methodological debates have (mostly) advanced beyond asking whether or not computational phylogenetic methods can be used to study language history. The questions now are about how computational phylogenetic methods can best contribute. In the first part of this lecture I will review the current state of the synthesis emerging between traditional approaches to historical linguistics and computational phylogenetic methods.

But while quantitative phylogenetic methods may enrich the kind of genealogical inferences made in historical linguistics, I believe the greatest promise to the field goes beyond this. If we are interested in language variation — how languages change and why languages are the way they are — then the inference of genealogical relationships provides a crucial statistical backbone to any analysis. In some cases genealogy might be considered a nuisance parameter: are two linguistic features correlated because there is a functional relationship between them, or is this correlation an artifact of a historical coincidence in a mutual ancestor? A model of language genealogy allows us to infer ancestral states of linguistic (and some non-linguistic) features on a sound statistical basis. Genealogically informed statistical techniques allow us to investigate the dynamics of language change and the interaction between language and (geographic and social) environment. I will illustrate some of these prospects with analyses of structured lexical semantic change (domains such as body parts, colour names, or address terms), an area which has proved challenging for diachronic comparative analysis.

Phylogenetic methods have only begun to be exploited in linguistics, and there is enormous scope for further investigation. I predict that the role of historical linguistics will grow in importance in all areas of the study of linguistic diversity.

Convivial separation: divergence under contact

Nicholas Evans (CoEDL, Australian National University)

In this talk I will discuss a range of cases where contact between languages does not lead to convergence, and may even produce divergence.

The normal result of language contact is widely assumed to be convergence. Historical linguistics has a long-standing awareness of Sprachbünde or 'linguistic areas', defined as zones characterised by shared traits which would not independently be expected to occur (through phylogenetic descent) across all families in the area, mediated by bilingualism. This has recently been taken to more sophisticated levels by overviews of language contact (Thomason & Kaufmann 1988), by case-studies of how metatypy (structural and semantic convergence) can lead to thoroughgoing structural isomorphism between unrelated languages (Ross 1996), and a double rooting of convergence in shared norms of conversational practice (Enfield 2005) and cognitive economy in bi- or multilingual individuals for whom it is most efficient to draw upon a shared representational system (Matras ref) as an important ingredient of cognitive streamlining in the mind/brain of those individuals who need to move from language-neutral cognitive representations to one of many language-specific outputs. All of these strands point to an ever-stronger body of empirical findings and causal mechanisms for accounting for convergence between languages in contact.

And yet there is, at the same time, growing evidence that contact does not always produce convergence. Evidence for this has followed a (sometimes disconnected) scholarly trajectory reaching back to Larsen's (1917) idea of *naboopposisjon* (lit. 'neighbour opposition') fostering differentiation between Norwegian dialects, and Saussure's notion of an *esprit de clocher* (parochialism) offsetting the drive to communicate more widely, through the notion of *eseterogeny* (elaboration of difference and impenetrability) elaborated by William Thurston (1987, 1992) to account for the apparently deliberate cultivation of language difference found in many parts of Melanesia (Laycock 1982a,b), through studies of 'correspondence mimicry' in Australian languages (Alpher & Nash 1992, Koch 1997, Nash 1997) which 'dealienate' suspected loanwords by retrofitting them using multilingual metalinguistic knowledge of sound correspondences between neighbouring languages. Growing awareness of the importance of non-convergence and even divergence in contact situations has recently led to the publication of an important collection of studies by Braunmüller, Höder & Kühl (2014), with focussed sociolinguistic and corpus-based studies of contact situations in a number of European languages, as well as a number of studies of divergence in European dialects (Auer et al 2005).

There have by now been studies from a number of parts of the world which report far-reaching lexical differentiation in contact situations, such as Amazonia (Aikhenvald 2010) or Vanuatu (François 2011). However, the situations they report generally exhibit grammatical convergence (or at least

shared maintenance of grammatical norms) slipping below the radar of a strong linguistic ideology promoting inter-group differentiation through the lexicon. Yet this is far from universally the case: we know that generalisation of cross-language proportions may also lead to differentiations in morphological systems between neighouring languages, be it from a principle of structural correspondence (Evans 1998), the seizing upon of accumulated category contrasts in groups melding two systems (e.g. Kune Dulerayek dialect of Bininj Gun-wok in Evans 2003), or the apparently conscious distancing of one language's grammatical norms from another, as happened with differential object marking in Portuguese as intellectuals from the eighteenth century on sought to differentiate themselves from Spanish norms (Döhla 2014).

My goal in this talk, then, is threefold.

In the first part I survey a number of case studies which establish that non-convergence despite contact is a real and significant phenomenon. I will draw particularly on examples from Australia and New Guinea, including cases where the processes of divergent change can be observed happening, through studies of sociolinguistic variation as part of the ongoing project *The Wellsprings of Linguistic Variation*.

In the second part I propose a general model for divergence under contact, whose ingredients are

(a) a range of mechanisms for generating divergent structures, from psycholinguistic mechanisms making it easier to produce formally distinct signs under conditions of bilingualism (Ellison & Miceli in prep.), through summative complexification, where a language in a contact situation accumulates structures from two (or more) neighbouring languages, to metalinguistic knowledge of mapping rules between two or more languages

(b) social settings favouring linguistic signalling of group-membership distinctions

(c) social processes of linguistic ideology and praxis selecting for distinct structural options

In the third and final part I raise some unanswered questions for our understanding of divergence under contact, itself a key to understanding the genesis of linguistic diversity. Among these are: Are there restrictions on what parts of the language system can diverge under contact? How far does metalinguistic knowledge play a role in divergence under contact, and are there significant differences in linguistic cultures that promote or retard the effects of multilinguistic metalinguistic knowledge? And are there really high cognitive costs to maintaining divergent linguistic systems in bi- and multilingual settings? Are there limits to how many linguistic elements may diverge in a stable multilingual setting: if cognitive cost is a worthwhile investment to signal different social affiliation, are there nonetheless limits on cognitive cost can be born in terms of summed typological disparities?

Multiple Exponence in Historical Perspective: Typology and Explanation

Alice C. Harris (University of Massachusetts)

Many different relationships have been discussed between typology and historical linguistics. Here I examine the possibility of the historical linguistics explaining distribution of rare and infrequent

phenomena, using as my example multiple exponence. Multiple (or extended) exponence is the occurrence of multiple realizations of a single morphosemantic feature, bundle of features, or derivational category within a word (Harris, to appear). I limit this lecture to multiple exponence (ME) that is systematic or predictable, setting aside lexically governed ME. I focus on two related questions: Why are multiple exponents so often out of the expected order of morphemes? Why are identical multiple exponents so seldom adjacent?

Pertinacity of phonological constraints on loans

Aditi Lahiri (University of Oxford)

Loans can have drastic effects on phonological systems and sometimes the surface changes suggest that the native phonology has been entirely ignored. Furthermore, there is a suggestion that metrical shifts are stronger than segmental changes. Nevertheless, a closer look at individual cases shows that native segmental, metrical and tonal phonological constraints operate effectively and persistently on loan incorporation. The hypothesis that will be entertained is that phonological opacity leads to varying choices for native speakers, and the ensuing choice is governed by the existing phonological preferences. The evidence comes from detailed case studies Germanic and Indo-Aryan languages. These will include quantity contrasts in Old High German, metrical (re-)organisation in medieval Germanic (English, German, Norwegian, Dutch) and Old Bengali, shift in tonal and laryngeal specification in Scandinavian languages, and increase in marked segmental contrasts in all Early Modern English and Early Modern Bengali. In all of the above, the loans may affect the lexicon which could change the statistical preferences (e.g. increase of Accent 1 words in Norwegian, increase of CORONAL consonants in Indo-Aryan, addition of stressed suffixes in Germanic), but at each stage the phonological grammar plays a constraining influence.

Parameters in the development of Romance auxiliary selection

Adam Ledgeway (University of Cambridge)

A comparison of Latin and Romance syntax reveals some radical developments in the passage from the parent language to the daughter languages that can be readily conceived of in typological terms as involving a ‘great leap’, and at the same time a series of ‘smaller steps’ both in the passage from Latin to Romance and in the subsequent developments that have given rise to considerable

differentiation across the many Romance varieties. Since the conception in early GB of UG in terms of a small set of abstract principles subject to parametric variation largely coinciding with the main typological classes recognized by traditional descriptive linguistics (Chomsky 1981; Baker 1996), changes of the former type have traditionally been modelled in terms of **macro**parameters. Over recent decades, however, much work has radically departed from this macroparametric view with a shift of focus on predominantly surface-oriented variation (cf. Kayne 1996; 2000; 2005a,b; Manzini and Savoia 2005), an approach well suited to modelling the 'smaller steps' in diachronic change. This has led to the proliferation of a remarkable number of local, low-level **micro**parameters interpreted as the (PF-)lexicalization of specific formal feature values of individual functional heads (Borer 1984; Chomsky 1995) in accordance with the Borer-Chomsky Conjecture (Baker 2008:353).

In this paper I shall undertake a synchronic comparison of auxiliary selection across a number of different Romance varieties which show how minimal differences among otherwise highly homogenous 'systems' can be used to investigate microvariation along the diachronic axis in order to better understand what precisely may vary and how such variation may be implicationally structured in relation to the predictions of parametric hierarchies (cf. *Reconstructing Comparative Syntax*: recos-dtal.mml.cam.ac.uk). Modelling changes in different auxiliary patterns in terms of parametric hierarchies, I shall argue that the structural organization of such hierarchies and the predictions that they make about markedness relations between different linguistic choices can be profitably used, especially when earlier stages of languages are not documented, to understand the direction of change, what precisely may change, and how such diachronic variation may be implicationally structured. The overall picture will highlight an unmistakable tension between the demands of detailed empirical description on the one hand, which forces us to assume many distinct featural (viz. microparametric) instantiations of different functional heads across Romance, and the desire to provide a principled explanation within the limits of a maximally constrained theory of UG on the other.

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The Use of the Past to Explain the Past: Roman Grammarians and the Collapse of Vowel Quantity

Marco Mancini (Sapienza - University of Rome)

This paper focuses on the collapse of vowel quantity from Late Latin to Romance languages. Moving from the Collingwood's statement that «knowledge advances by proceeding not 'from the known to the unknown', but from the 'unknown' to the 'known'», some opaque metalinguistic sources are thoroughly investigated and interpreted. The aim is to present a new hypothesis concerning the intermediate stage between standard Latin with distinctive quantity and Romance varieties with predictable vowel quantity in stressed syllables. A close scrutiny of the testimonia of late Roman grammarians, as priviledged authorities from a crucial stretch of time for the evolution of spoken Latin, contradict the idée reçue of an early so-called "Romance quantity" as the straightforward outcome of the loss of Latin quantity. Yet, in light of a handful of passages, there is good reason to assume that the stressed vocalic allophones, either long or short, were always phonetically long in the overwhelming majority of Roman sociolects. A very similar situation can be detected in modern spoken Italian, where long vowels occur under stress, both in closed and open syllables. The analysis seems to confirm that a correct and cautious explanation of the "bad data" (Labov) transmitted from the past must be the corner stone of linguistic historians' work.

Roots and branches in the variation of English

Sali A. Tagliamonte (University of Toronto)

In the presentation, I analyze corpora of spoken vernaculars in three geographic regions, the UK, Canada and the Caribbean, displayed in Figure 1. The communities comprise a range of relic, rural and urban contexts as well as source and off-shoot situations. Taken together they offer multiple tests for probing questions of historical origins, transmission and diffusion, obsolescence and innovation. What can a comparative perspective, variationist sociolinguistic methods and quantitative analyses contribute to probing these questions and offering insights?

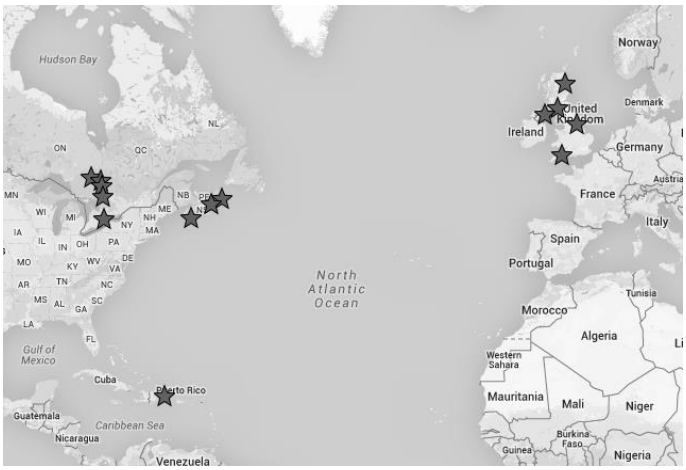

Figure 1: Map of communities

I focus on several linguistic features that contrast different types of change. An obsolescing feature, verbal *-s* as in (1), is found in most places. Longitudinal changes, such as in the stative possessive, as in (2), flourish but with diverse composition of the alternating forms, *have/'s/'ve got*, *has/have* and *got*. Within the relative pronoun system, circumscribed use of the well-known change from above, *who*, exposes the influence of the standard language and social evaluation.

(1) The dialects really *comes* through strong. (PVG/I)

(2) We always *have* an advance party ... it *'s got* its advantages. (MPT/n)

(3) All the farmers *who* were able, they'd go. (ALM/005)

While the dialects may differ in their favoured variant in each change and frequency can vary dramatically, the internal linguistic factors that constrain the variability offer decisive insights. When parallel constraints can be traced in the history of the English language, they can be interpreted as persistence. While cross-dialectal differences in frequency expose how the changes are progressing, contrastive internal patterns offer insights into stages in the evolving system and distinguish transmission vs. diffusion Through the lens of contrast and comparison, it is possible to identify exogenous vs. endogenous change and to expose universal patterns vs. local deviations.

The findings combine to show that that synchronic data contribute a great deal to understanding the mechanisms that constrain processes of linguistic change. The large scale multi-variety perspective is critical for making sound use of the dialectic between diachronic change and synchronic variation.

GENERAL SESSION: ORAL PRESENTATIONS

How linguistic processing determines language change – psycholinguistic evidence from German inflectional morphology

Tanja Ackermann (Freie Universität Berlin)
Christian Zimmer (Freie Universität Berlin)

Functional explanations of language change phenomena are mainly based on (alleged) benefits of linguistic innovations. However, there is usually no empirical evidence for the benefits of these innovations why functional approaches can often merely be evaluated by the plausibility of the arguments. Obviously, it is often simply not possible in historical linguistics to discuss empirical data apart from corpus data. An interesting way to examine factors that determine language change apart from discussing corpus data is investigating contemporary language change phenomena. In our talk, we want to demonstrate this approach by analyzing the German nominal inflection system, which is characterized by strong synchronic and diachronic variation (cf. examples 1–3).

(1) Variation in number inflection of peripheral nouns

Tax-en	vs.	*Taxi-s*
taxi-PL		taxi-PL
‘taxis’		

(2) Variation in case inflection of peripheral nouns

d-es	*Internet-s*	vs.	*d-es*	*Internet*
the-GEN.SG	internet-GEN.SG		the-GEN.SG	internet
‘of the internet’				

(3) (Diachronic) variation in case inflection of personal names

Ich	*sah*	*Mari-en*	>	*Ich*	*sah*	*Maria*
I	saw	Maria-ACC.SG	>	I	saw	Maria
‘I saw Mary’						

A hitherto not very well described factor called *morphological scheme constancy* seems to be highly relevant in the explanation of these related phenomena. This term refers to word form stability through the avoidance of inflectional elements that affect the shape of a word (cf. example 1), or the avoidance of inflectional elements at all (cf. examples 2 and 3). It is claimed that inflection (and especially strong stem modification, e.g. added syllables) hinders the recognition of peripheral nouns, such as proper names, loan words, and abbreviations. Using certain suffixes that do not affect the shape of a word strongly (cf. example 1) or using no suffix at all (cf. examples 2 and 3) therefore seems to be functional here. In order to evaluate the alleged benefit of morphological scheme constancy regarding the recognition of peripheral nouns with psycholinguistic data, we exemplarily examined the

contemporary variation between *-s* and *-Ø* in genitive phrases (cf. example 2) by means of a self-paced reading task. The results confirm the alleged benefit of word form stability with regard to linguistic processing and complete our functional argumentation, which is also based on synchronic and historic corpus data as well as acceptability judgement tasks.

In sum, the analysis of the phenomena discussed emphasizes that historical linguistics can benefit from the evaluation of functional arguments on the basis of psycholinguistic data.

Actionality and viewpoint aspect in Old Russian: a diachronic corpus-based account

Anna Alexandrova (Scuola Normale Superiore, Pisa)

The Russian aspectual system, since its earliest attested stage of development, is known to have undergone a number of drastic formal (morphosyntactic) and functional (semantic) changes. On the formal level, the main events have been: (1) the loss of the aorist/imperfect distinction in the domain of past reference, (2) a further development of verbal prefixation and (3) the development of secondary imperfectivization. On the functional/semantic level, along with the loss of inflectional (viewpoint-)aspectual forms, the viewpoint-related aspectual functions were subsequently transferred from inflectional morphology to the lexicon. Thus, in the present-day Russian, verb stems encode syncretically viewpoint aspect and actionality. This view of the evolution of the Russian aspectual system dates back to Maslov, who claimed that the Slavic perfective vs. imperfective aspectual opposition arose from a reanalysis of the derivational morphology of telic and atelic verbs (Maslov 1961/2004). In spite of the fact that Maslov's hypothesis looks plausible, it needs checking, because the exact mechanism of the change in question has never been accounted for on the basis of large textual data.

I propose a corpus-driven account of Old Russian actional classes, based on Vendlerian semantics (Vendler 1967, Dowty 1979). I adhere to the two-dimensional view of aspect (Smith 1991; Depraetere 1995; Bertinetto & Delfitto 2000; Tatevosov 2002 and others). The perfective/imperfective contrast, pertaining to the viewpoint aspect, is therefore considered to be represented by language-specific grams (e.g., 'aorist', 'perfect' vs. 'imperfect', 'progressive', etc), whereas the lexical aspect (=actionality) can be found in any language, in that event types based of the features [±telic], [±durative], [±dynamic] are basically universal. I believe that such a study can provide some important clues for a better understanding of the grammaticalization process of the Slavic-style aspect.

Standard tests for durativity and telicity are used, namely, 'for X time' (atelic-extent adverbials) and 'in X time' (telic-extent adverbials). The bulk of the data was extracted from The Primary Chronicle (Povest' vremennych let), using Ostrowski's stemma of the Primary Chronicle (Ostrowski 2003-) as a parallel corpus. In addition, the Kiev Chronicle and some other texts were examined.

The main findings of the present survey are:

(1) It seems that there was no unambiguous telic-extent adverbial modifier in Early Old Russian, which could trigger 'telicizing' coercion. This fact appears to be coherent with the tendency towards overt marking of telicity by means of prefixation on verbs.

(2) Atelic-extent modifiers selected the atelic reading of the verbs, ambiguous between states and achievements (state vs. change of state syncretism).

(3) Some instances of 'detelicizing' coercion can be found. Atelic-extent modifiers could coerce prefixed, inherently telic, proto-perfective verbs into an atelic reading. It can be hypothesized that this type of coercion was lost when imperfectivization became more productive.

(2) is a well-known phenomenon and (1) is somewhat unusual, although coherent with the previous data on the topic, while (3) is a completely unexpected and novel piece of data, probably leading to a certain reassessment of our view of the history of Russian aspect.

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The definition of the root between history and typology

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State-of-the-art and objectives. The current literature assumes that the root is either a diachronic unit or that it coincides with a simple stem from the synchronic point of view. This definition is common in textbooks on morphology (Bauer 2003: 13), dictionaries of linguistics (Trask 1993: 224), typological studies on the parts of speech (Lehmann 2010: 50), and in specialist works on Indo-European and Semitic studies (Wachter 1998; Larcher 1995).

However, this definition is far from absolute. Saussure (Course 1922: 256, Belardi 1993) claimed the existence of a deep typological difference between the root and the simple verb stem, and the same idea is found in Harris (1946: 166, Alfieri 2013). However, Saussure's definition of the root is based on the so-called morphological typology, which is notoriously inconsistent, and Harris' definition, which is similar to that in Cantineau (1950), is based on the formal features of Semitic languages and cannot be applied across languages.

In sum, the synchronic-typological definition of the root opens a dilemma of theoretical nature, which is crucial in historical linguistics—are the root and the simple stem the same unit of analysis synchronically? And why? If they are not, how should their differences be defined across languages? How does it affect the history of the IE and the Semitic family? The paper aims to answer these (or similar) questions.

Methodology. First, a conceptual map is built. The map combines two language external, prototypically correlated parameters, a universal semantic concept (Object, Quality, Action) and a universal syntactic function (Argument, Modifier, Predicate), Tab. 1:

	ARGUMENT	MODIFIER	PREDICATE
OBJECT	Object Argument	Object Modifier	Object Predicate
QUALITY	Quality Argument	Quality Modifier	Quality Predicate
ACTION	Action Argument	Action Modifier	Action Predicate

If the Modifier Column is isolated, and the different modifier constructions coding the boxes in Tab. 1 are contrasted in Latin and in Vedic/Arabic, a suitable definition of the root is found. Obviously, languages may show more modifier constructions, but only 1 construction is mapped in each box. If more constructions are found, only the most frequent is mapped.

In Latin, the most typical Quality Modifier is an agreeing stem (puella pulchr-a "a nice girl"), the most typical Object Modifier is a stem in the genitive (puella milit-is "the girl of the soldier") and the most typical Action Modifier is a participle (puella curr-ens "a running girl"). If 3 constructions are found in the Modifier Column, one for each box, and the items filling each construction cannot fill the others without class changing processes (**puella milit-a or curr-a, **puella pulchr-is or pulchr-ens), then 3 major classes of items are stored in the lexicon: nouns, verbs and adjectives.

In Vedic, the Object Modifier is coded through a genitive (ex. 4), but the Quality and the Action Modifier are coded through a nominalization (ex. 5, 6):

1) [Indra-s] kṣapā́m vas-tā
Indra-NOM night.F-GEN.PL bright-NM.NOM.SG
"[Indra] clarifier of the nights" (RV III.49.4ab)

2) tap-tā́ gharmā́ aśnuv-ate visargá-m
be_hot-NM.NOM.M.PL hot_season.NOM.M.PL get-PRS.3PL.MD end.M-ACC.SG
"the hot seasons come to an end" (RV VII.103.9d)

3) ci-ket-a dyaú-r iva smáya-mān-o nábho-bhiḥ
brighten.PF.3SG sky.F-NOM.SG as laugh-NM-NOM.M.SG cloud.NT-INS.PL
"[Agni] brightens as the sky laughing within the clouds" (RV II.4.6d)

Obviously, the Quality Modifier may also be coded in Vedic through an agreeing simple stem: kr̥ṣṇó rájas "dark space". Still, only 12-14 primary adjectives are listed in Grassmann's Worterbuch zum Rigveda (Alfieri 2009) and, in the sample of 35 Vedic hymns analyzed in Alfieri (2011), the construction in 5) outnumbered the simple stem modifier by approx. 3:1. Therefore, if 2 major constructions are shown in the Modifier Column and the items filling either construction cannot fill the other without class changing processes (**kṣap-tā́, **kṣap-māno), a language with 2 major lexeme classes (verbal roots and nouns) is found in addition to a small set of adjectives. The same situation that occurs in Vedic is also found in Arabic, and the same contrast (3 constructions in Latin vs. 2 main constructions in Vedic and Arabic) is also found in the Argument and the Predicate Column as will be shown in the presentation.

Expected results. Two results are expected. First, a typologically consistent definition of the root is supplied. Moreover, by virtue of this definition, a new and potentially productive line of research in historical linguistics can be opened. Most adjectives of the Indo-European languages can be traced to PIE verbal roots of quality meaning, although the reconstructive evidence is not totally uncontroversial. However, if this analysis is correct, it means that a large-scale typological change occurred in the IE family: during the evolution of the family, an adjective class has been lexicalized and, at the same time, a specific adjective inflection has been grammaticalized. Each type of change occurred independently in each IE language, but has been realized in almost all of the branches of the IE family, so it represents a case that we can identify as "second generation isogloss". In sum, scholars usually describe the typological change from PIE to the IE historical languages by quoting the decrease of morphological complexity, the blurring of intra-word morphemic boundaries (Belardi 1993), the decreasing productivity in nominalizations (Pangal 1983), and the changes in the coding of the unaccusative-adjectival predicates (Lazzeroni 2004). However, if the lexicalization of the adjective

class is added to these changes, a typologically coherent description of the change from a language "with roots" to a language "with stems" is obtained.

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Normativity and language change

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Historical linguists have adopted several different, sometimes even contradictory, metatheoretical positions regarding the nature of their subject matter: *language* and *language change*. Some have adopted the metatheory of generative linguistics (e.g. Ringe & Eska 2013), some emphasize common ground with evolutionary biology (e.g. Lass 1997), while others prefer more pragmatic and functional approaches (e.g. Anttila 1989). The social nature of language has been acknowledged by many, but the central role of normativity in language and in linguistics has often been neglected or underestimated (notable exceptions include Coseriu 1971; von Wright 1963; Itkonen 1978, 1983, 2003, and others). In fact, individual studies often leave metatheory completely unaddressed. We, however, strongly advance the view that all linguists (including the historical linguist) ought to explicitly and systematically state their metatheoretical background and consider its implications.

In this paper, we argue for a theory of language change that is rooted in the more general metatheoretical frame of *normativity*, which itself belongs to the functional branch of linguistics. In our view, the change in an object of inquiry should be analysed in the same general frame of reference as the object itself (cf. Anttila 1989: 3). This is especially justifiable in linguistics, as change is demonstrably an innate and irreducible property of language.

We subscribe to the contingent fact that language consists of *norms* (von Wright 1963: 107), which determine the *correctness* of linguistic expressions (Itkonen 1978, 2003; cf. Bartsch 1987: 70). Norms are of social nature, constituting the *rules of language*, and they are known by *intuition*. Norms may be *discrete* (*obligation norms*) or *non-discrete* (*permissive norms*), that is, they may determine the correctness in absolute (correct/incorrect) or gradual (more correct/less correct) terms (von Wright 1963: 71; Itkonen 2008: 295). For instance, most norms governing nominal inflection are discrete, while norms governing word order are, at least in non-configurational languages, typically non-discrete. Likewise, the behaviour that norms subsume is non-discrete, which means that norms can (and will) be broken (Bartsch 1987: 166; Itkonen 2008: 295). However, the appearance of counter-normative expressions neither makes the norm disappear nor reduces the discreteness of the norm. It is a matter of fact that some norms, especially non-discrete ones, allow a certain amount of *variation*, but this happens always within strict limits. In a specific context, the amount of variants may be reduced to just one by rationality principles (see below).

While formation of linguistic expressions is governed by norms of correctness, actual language use is regulated by *norms of rationality*, or *rationality principles*, which determine the (ir)rationality of linguistic actions (Itkonen 1983: 65-68; cf. Leech 1983: 21-24). Diachronic explanation can be subsumed under the more general category of rational explanation, in which rational actions can be seen as solutions to problems perceived by the speakers (Itkonen 1983: 201-211).

Language change, then, consists of change in the norm content of the language. Norms themselves do not change, but old norms may be replaced by new ones. Alternatively, new norms may appear or old ones disappear independently—these three constitute the most basic cases of language change. If the *social control* of a norm begins to loosen, more and more counter-normative expressions appear, effectively creating a 'grey area', where correctness is difficult to determine in absolute terms. When the proportion of norm-following behaviour drops below a certain threshold, language change takes place and the norm ceases to exist (Itkonen 2008: 295–296). The appearance of a new norm, then, includes the important ontological step in which a tendency is re-interpreted as an obligation with concomitant increase in social control ('is' becomes 'ought to').

In this paper, we will discuss the advantages of a normativity-based theory of language change. In particular, we will demonstrate that, in addition to being a significant *theoretical* concept, normativity has useful *practical* applications. For instance, some problems regarding the changes that took place in the Latin prepositional case syntax during the early imperial period can be explained with the aid of the concept of normativity (see Alho & Leppänen *forthcoming*). Additional examples to be discussed in the paper are drawn from our undergoing research projects.

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Definite marking in Baltic, Slavic and Germanic: Common inheritance, parallel innovations, or contact feature?

Henning Andersen (UCLA)

Handbooks of Slavic and Baltic languages traditionally consider the inherited marking of definiteness (Def) in adjective phrases (AdjPs) in these two branches of Indo-European a shared, Balto-Slavic innovation. Occasionally the handbooks mention the equivalent expression of AdjP Def in the Common Germanic "strong" and "weak" adjectives, either implying some real, historical connection between Germanic and Baltic–Slavic (Fraenkel) or denying any such connection (Vaillant).

In any case, there are morphological and chronological differences that seem hard to bridge. First, the inflectional Def expression in Common Germanic contrasts with the enclitic pronominal marking in Slavic and Baltic; see (1). If there is a historical connection it would have to be the result of language contact. Secondly, Common Germanic Def marking most likely was established before our era; the earliest attestation is in Gothic in the 300s, which has already grammatized the SAE definite article (underlined in (1.c)). The earliest Slavic attestation is from the 800s. The Old Lithuanian attestation is from the 1500s.

(1) a. Li. *Atvedė pas jį* ***akl-ą*** *….* *Ir nutvėręs* ***akl-o–j-o*** *ranką ….*
brought.PST.3 to him blind.IDEF.M.AS ... And taking.PST.PCP blind.DEF.M.GS hand.AS ....
b. OCS *Privěsę kŭ njemu* ***slěp-a*** *….* *I imŭ* ***slěp-a–j-ego*** *za rǫkǫ ….*
brought.AOR3PL to him blind.IDEF.M.AS .... And taking.PST.PCP blind.DEF.M.AS by hand ....
c. Go. *Jah berun du imma* ***blind-a-n*** *.... Jah fairgripands handu* <u>*þis*</u> ***blind-in-s***
and brought.PST.3PL to him blind.IDEF.M.AS ... And taking.PRS.PCP hand.AS the.M.GS blind.DEF.M.GS ....
"And they bring a blind man unto Him …. And He took the blind man by the hand …." (M 8,22–23).

Still, interestingly, in all three branches, in the earliest attestation, NPs and PPs occur with Def marking—in Gothic in the form of derived n-stems (Kotin), in Slavic and Baltic simply expressed with the enclitic "article" (Zinkevičius); see (2). But Def marking soon becomes restricted to morphological adjectives. Also, quite coincidentally, the Slavic and Lithuanian attestations begin at about the same stage of development after the initial grammation and illustrate numerous small steps in the respective processes of univerbation.

(2) a. OLi. *danguyeyis* 'the [one] in heaven', i.e. dang-ują.LS=j-is.M.NS;
b. OCS *besposagaja* 'the unmarried (woman)', i.e. bez=posag-a.GS=j-a.F.NS; literally 'the [one] without (wedding) vow';
c. *ala-þarba* 'indigent', lit.: (one who) needs all.

The data are not compatible with the traditional idea of a shared Balto-Slavic inheritance. Instead, an areal-linguistic interpretation is called for (cf. Heine & Nomachi). Although these developments are largely prehistorical, there is just enough historical and toponymic information that one can make a case for a propagation of AdjP Def marking from Slavic to Baltic dialects during the first millennium CE. Such an account will have to consider the homologous constructions in Old Iranian. Whether the early grammation of AdjP Definiteness in Germanic can be integrated in such an account may remain an open question.

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Towards a history of case and location markers in East Caucasian

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East Caucasian languages, although spoken in a very compact area, clearly constitute an old family with deep internal differentiation. They are nevertheless generally famous for breaking records in the number of cases they use, with some ninety forms reported in Tanti (a Dargic variety) following Lander & Sumbatova (2014). In fact, as shown by Comrie & Polinsky (1998), this « inflectional galore » (Kibrik 2003) is almost always morphologically straightforward : most case forms have original spatial functions and consist of two morphemes, one for location and another following for type of orientation and movement (or lack thereof). Following Alekseev (1997), the system is old, since static location formants are inherited, having reconstructible etyma in the proto-language. A renewed account is nevertheless desirable, to bring the data in line with advances in the typology of case and deixis, taking into account a number of previously poorly known languages that were provided in recent years with thorough grammatical descriptions or dictionaries.

The presentation at this workshop will focus on the location markers and update the reconstruction of their forms and functions in intermediate proto-languages of the eight or nine single branches of the East Caucasian family. We will also address the relevance for genetic classification of two coexisting strategies for the less marked location : either gender agreement with the nominative argument of the clause (in Avar-Andic, Lak, and Dargic languages), or use of a formant –a/-glottal stop on the same level of semantic specificity as other location markers (in Lezgic and Tsezic languages and probably Avar). The general trends of semantic drift in sub-branches and particular languages or dialects will be sketched out, including grammaticalized uses like differential recipient/dative (Daniel *et al.* 2010) and possessor/genitive (Authier 2013) marking, as well as animacy restrictions, « rare cases » (similative, equative, substitutive, addressative, precative and others) and apparent instances of transfer of markers across the domains of (static) location, goal, source, and path.

The comparison of language-based semantic maps will confirm deep-rooted (genetic) similarities, probably enhanced by contact and calques, and systematic attrition / restructuring phenomena in the periphery of the area. Nevertheless, following an idea initiated by A. Kibrik (unpublished 2008), a glance at relative chronology shows that location markers are less morphologically bound than usually assumed, and certainly less ancient than « oblique » (=ergative/genitive) cases (not to mention goal, source and path markers which are obviously recent

creations in individual languages or subbranches). This strongly suggests parallel evolution in various branches of the family from an inherited set of postpositions to similar-looking case systems.

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Dative Subjects in Germanic: A computational analysis of lexical semantic verb classes across time and space

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One of the functions of the dative is to mark non-prototypical subjects, i.e. subjects that somehow deviate from the agentive prototype. As all subbranches of Indo-European (cf. Barðdal et al.

2012), the Germanic languages exhibit structures where the subject or the subject-like argument is not in the nominative case, but in the accusative, dative or genitive, for instance. The focus of this article is on the dative, leaving accusative and genitive subjects aside, in particular homing in on lexical semantic similarities and differences between the different Germanic languages. We will compare Modern Icelandic, Modern Faroese, and Modern German, on the one hand, and the historical Germanic languages, i.e. Gothic, Old English, Old Saxon, Old High German, Middle English, Middle Dutch, Middle German, Old Icelandic and Old Swedish, on the other. The goal of this comparison is to document the semantic development of the construction across time, and to reconstruct a semantic field for Proto-Germanic on the basis of this comparison. As the Germanic languages are both genetically and areally related, we will suggest a computational model aiming at disentangling genetic and geographical factors, in order to estimate to which degree the two interact with each other across languages and across historical eras.

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Non-Canonically Case-Marked Subjects in Hittite and Old Irish: An Investigation into the Subjecthood of the Early Indo-European Languages

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Non-canonically case-marked subjects are a well-known feature of many of the languages of the world, including several of the modern Indo-European languages, such as Icelandic and Faroese from the Germanic subbranch (Andrews 1976, Thráinsson 1979, Sigurðsson 1989, Barnes 1982, inter alia) and Urdu and Marathi from the Indo-Aryan branch (Masica 1976, Verma & Mohanan 1990, Mohanan 1994). For other modern Indo-European languages that have maintained case marking, opinions are divided on whether corresponding non-canonically case-marked subject-like arguments should be analyzed as syntactic subjects or not, as in Russian, Lithuanian, German, Italian, etc. (More & Perlmutter 2001, Holvoet 2013, Fanselow 2002, Benedetti 2013).

Given this inconsistency in the syntactic behavior of oblique subject-like arguments across the modern Indo-European languages, the question arises as to whether the Icelandic–Faroese–Urdu–Marathi situation is the original one, with oblique subjects having lost some of their subject properties

over time, or whether the Russian–Lithuanian–Italian situation is more original, with Icelandic, Faroese, Urdu and Marathi having gained subject properties over time.

For the early Indo-European languages, opinions diverge even more. Hock (1990) argues, for instance, that subject-like datives of possessive constructions show behavioral properties in Sanskrit, but subject-like datives of experiencer predicates do not. For early Germanic, Barðdal & Eythórsson have shown in a series of papers that only a subject analysis is compatible with the linguistic evidence, including evidence from Gothic, the earliest attested stage of Germanic (Barðdal & Eythórsson 2003, 2012, Eythórsson & Barðdal 2005). Fedriani (2009) shows that oblique subject-like arguments in Latin exhibit several properties of subjects; Grillborzer (2011) makes the same claim for Old Russian, and work is now ongoing on Ancient Greek (Danesi in prep), Hittite and Old Irish.

One of the disadvantages of investigating subject behavior in Sanskrit, Latin and Ancient Greek, for instance, is the freedom of word order found in these languages. Any such attempt will necessarily have to consider factors based on both information structure and metrics. Since Hittite and Old Irish, however, show much less freedom in word order, they are ideal candidates for investigating subject properties and syntactic behavior of oblique subject-like arguments in the early Indo-European languages.

The present paper reports on ongoing work on Hittite and Old Irish. We document which predicates select for oblique subject-like arguments in these languages, as no such exhaustive lists exist today, and we investigate to which degree the subject tests suggested in the typological literature and the literature on the modern Indo-European languages can be used as a point of departure for establishing subject properties in Hittite and Old Irish. This is done by comparing the syntactic behavior of canonical subjects and objects in these languages vis-a-vis a number of potential tests that may distinguish between subjects and objects, like basic word order, reflexivization, raising and control. If these tests can be validated as distinguishing between canonical subjects and objects, the syntactic properties of oblique subject-like arguments will be investigated and compared with canonical subjects and objects in Hittite and Old Irish. Otherwise, new distinctive behaviors of subjects and objects need to be identified.

Hittite and Old Irish provide as such a strategic opportunity to approach the issue of the syntactic status of oblique subject-like arguments in the early Indo-European languages in a way that many of the other early languages do not. Thus, research into subjecthood in Hittite and Old Irish may not only shed light on the long-standing debate on the syntactic status of oblique subject-like arguments in both the early and the modern Indo-European languages, but it may also uncover in general how changes in subjecthood take place over time.

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From interrogatives to relative pronouns via indefinites: *Wh*-based correlatives in Indo-European and beyond

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It is commonly assumed (e.g., Haudry 1973: 150, elaborated in Heine & Kuteva 2006: 209) that *wh*-based subordination develops from indirect questions through headless relative clauses:

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(1) a. constituent question: ***Who*** *came?*
b. indirect question: *I don't know* ***who*** *came.*
c. indirect question reanalyzable as headless/free RC: *You also know* ***who*** *came.*
d. headed relative clause: *Do you know the woman* ***who*** *came?*

This explanation clearly does not work for *wh*-based *correlative clauses* such as (2) from Latin.

(2) **cui** testimonium defuerit,**is** tertiis diebus ob port obvagulatum
who.DAT testimony lack he on.the.third.day before door waul.out
ito
go.IMP
'Whoever is lacking a testimony should go every third day to waul out before [the witness'] door.' (The twelve tables, II.3)

In early IE, such structures are found in Latin and Hittite. Crucially, they are diachronically prior to canonical, headed relative clauses. Correlatives in early IE languages are anaphoric in nature and admit an indirect (bridging) relationship between the *wh*-phrase and the correlate as in ordinary anaphora, cf. (3) from Hittite.

(3) **PÍŠ ga-pár-ta=na=kán** **ku-in***A-NA* DÙ EME ši-pa-an-ta-aš nu
animal:ACC=CONJ=PTC REL.ACCto made tongue sacrifice CONJ
^{UZU}NÍG.GUG ^{UZU}ZAG.UDU ḫa-ap-pí-ni-it za-nu-zi
intestines.ACC shoulder.ACC flame.INSTR burn.PRES.3S
'He roasts the intestines and the shoulders of **the animal which** he had sacrified to the artificial tongue.'
(lit. '**What animal** he had sacrificed to the artificial tongue, he roasts **intestines** and **shoulder** with the flame.') (Probert 2006: 63)

The anaphoric nature of the relationship suggests that wh-based correlatives have a similar origin as to that widely assumed for the (cross-linguistically more common) demonstrative-based correlatives, involving a parataxis-like construction, cf. (4), from Bambara (Givón 2009: 98).

(4) **cɛ** **min** ye muru san, n ye **o** ye
man REL PAST knife buy I PAST him see
('**That man** bought the knife, I saw **him**.' →) 'The man **who** bought the knife, I saw **him**.'

But we cannot simply transfer this analysis to *wh*-based correlatives, because interrogatives do not introduce discourse referents that could provide antecedents for the correlate. Instead, Lehmann (1984: 368–373) assumes that correlatives arise from the grammaticalization of structures where the *wh*-word is used as an *indefinite*, schematically as in: '**Some** (lit. '**which**') man bought the knife, I saw **him**.' However, there are two problems with this approach.

First, Hittite and Latin do *not* allow the use of bare interrogatives in declarative root clauses, but restrict them to (a subset of) negative polarity contexts. In Indo-European studies, it is common to reconstruct the root **k^{w}i/o-* as both interrogative and indefinite, but this is based on Ancient Greek alone: Hittite, Latin, Vedic, Old Church Slavic and early Germanic all restrict the use of the bare **k^{w}i/o-* interrogative to various negative polarity contexts, although the details differ. It is therefore plausible to reconstruct PIE as having a restricted, or in the terminology of Gärtner (2009) *non-robust*, indefinite-interrogative ambiguity, which was then generalized in Ancient Greek. This is in line with Haspelmath's (1997) observation that diachronically, indefinite pronouns tend to increase their scope.

Second, Lehmann's analysis fails to account for the affinity between correlatives and conditionals that is often observed in the literature (cf. Arsenijević 2009). Many correlatives get a

universal reading that is similar to a conditional: we can paraphrase (2) as 'If someone is lacking a testimony, he should …'. This generalizing reading does not fall out naturally of the meaning assumed by Lehmann: 'Someone is lacking a testimony. He should …'

We can solve both these problems once we realize that (a) antecedents of conditionals are one of the environments that license bare interrogatives as indefinites in Latin and Hittite and (b) the conditional structure need not be syntactically encoded but can arise through discourse subordination. Such structures remain productive through the history of Latin and are found with bare interrogatives as indefinites, cf. (6).

(6) negat **quis**, nego
deny.PRS.3SG REL deny.PRS.1SG
'If **someone** denies (it), I deny it.' (Terence, Eun. 252)

We claim, then, that correlatives grammaticalized out of exactly such structures as (6) (which continued to exist). This explains both why bare interrogatives appear as indefinites and the semantic link with conditionals.

In the subsequent development, structures such as (6), which we take to be asyndetic coordinations, were reanalyzed as adjunct–matrix structures, encoding the semantic dependency in the syntax. The crucial step in establishing correlative structures like (2) and systematically distinguishing them from conditional structures like (6) is the obligatorification of the anaphoric reference in the matrix clause to the indefinite in the correlative clause. We cannot observe this evolution in early IE since it predates the first texts, but the development is entirely parallel to the widely assumed evolution in demonstrative-based correlatives (4), except that we have a donkey (bound variable) anaphora in a quantificational structure rather than ordinary discourse anaphora in a paratactic context.

An interesting prediction of our analysis is that the generalizing reading of *wh*-correlatives must be primary since the use of interrogatives as indefinites requires discourse subordination and therefore the conditional reading. This means that specific/definite readings must be later developments and we predict that there are no languages where wh-correlatives only have a definite reading. We present a typological study which bears out this prediction. By contrast, we predict that dem-based correlatives, which arise from structures like (4), yield definite readings first, so there should be no languages where dem-correlatives have only generalizing readings. This is again borne out in our typological data. Within Indo-European itself, mood in (cor-)relativeclauses point in the same direction: Greek and Vedic, whose relative stem **yo-* is widely assumed be an original demonstrative, typically mark generalizing relative clauses with subjunctive morphology, whereas in Latin, there is no special marking of generalizing relative clauses.

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Gender and declension 'mismatches' in West Nordic

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In all Germanic languages nouns are classified according to gender and declension, although the complexity of the systems and the degree of correlation between the two vary (Kürchner & Nübling 2011). There has also been a diachronic tendency to align the two systems, making it particularly interesting to consider cases that run contrary to the general trend. This paper will address a couple of apparent 'mismatches' from the history of West Nordic (Old Norse and its descendants Norwegian and Icelandic) and discuss possible reasons for the mismatches as well as the interaction between phonological and morphological changes in the diachronic development.

Many feminine nouns that had NOM.SG *-r* (< PGm. **-z*) lost the ending before the emergence of Old Norse, explained by e.g. Bjorvand (1972) as a result of the *r*-ending being interpreted as a signal of masculine gender. Þórhallsdóttir (1997) points out that this expected change did not happen to the feminine *ijō*-stems. These words, however, form a semantically coherent group of words denoting female beings (e.g. *ylgr* 'she-wolf') or female names (e.g. *Sigríður*), i.e. the declension is closely connected by extra-morphological means. And it has even attracted female names from other declensions, precisely, it seems, because they share these extra-morphological properties. The few words not denoting something female have later changed their NOM.SG form also in Icelandic.

Bjorvand (1972) and Enger (2004) show how the tendency to link gender and declension in Norwegian has been strengthened since Old Norse, with masculines increasingly taking the plural suffix *-ar* and feminines *-er*. An important exception is feminines ending in *-ing*, which have *-ar* in the plural, but at least form a phonologically coherent group (Enger 2004: 73). On the other hand, diachronic changes have made the difference between neuter *ija-* and *a*-stems in Norwegian clearer – the inflection classes have been reinforced, as Enger (2014) puts it. The few *an*-stem ('weak') neuters have become reinforced by shared semantics – the class now only comprises words denoting body parts.

Nevertheless, there are also dialects where the *ija*-stems have not been 'reinforced', but rather merged with neuter *an*-stems. The two declensions were both disyllabic in Old Norse, and thus connected by their phonological form. In some dialects, these neuters have also merged with the disyllabic feminine *ōn*-stems, making the class comprise both feminines and neuters. This goes against the diachronic tendency in Norwegian for declension to become (more) predicted by gender (Enger

2004). There are thus conflicting tendencies even in Norwegian, which in a Germanic context has been given as an example of a very clear link between gender and declension (Kürschner & Nübling 2011: 374).

The merger of these declensions is partly due to phonological change (loss of final *-r* in the feminines made the INDEF.PL forms identical), partly morphological (a new ending in DEF.PL of the neuters). The new declension follows the general property of having distinct forms in INDEF.PL and DEF.PL, unlike the former neuter *an*-stems. Furthermore, the feminines in *-ing* have in some dialects switched to this declension, which during these changes have become type frequent enough even to attract loanwords.

These examples show that the diachronic interaction of gender and declension forms complex patterns of processes related to semantics, phonology, and morphology. The feminine *ijō*-stems in Icelandic and neuter *an*-stems in Norwegian are connected by semantic properties. On the other hand, the new Norwegian (dialectal) declension comprising old feminine *ōn*-stems and neuter *ija*- and *an*-stems (i.e. words of two genders) is a result of both morphological and phonological changes. These divergent developments will be discussed in relation to claims of a diachronic tendency to align gender and declension.

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It's all Greek to me? Tracking changes in micro-constructions

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This paper wants to present and discuss some case studies for what Traugott & Trousdale (2013) have recently described as 'constructionalization' and 'constructional change'. Constructionalization is defined as "the creation of $form_{new}$-$meaning_{new}$ (combinations of signs). It forms new type nodes [in the constructicon, AB] which have new syntax or morphology and new coded meaning in the linguistic network of a population of speakers" (Traugott & Trousdale 2013: 22).

Constructional change is understood as "a change affecting one internal dimension of a construction. It does not involve the creation of a new node" (Traugott &Trousdale 2013: 26). They also distinguish between 'micro-constructions' (concrete and rather simple single constructions) and constructional schemas (and subschemas), which represent abstractions over micro-constructions. Constructionalization can lead both to new micro-constructions and new schemas. The latter process is always gradual and seems to rest on changes that affect corresponding micro-constructions.

This paper explores and discusses this new model and its concepts by tracing in some detail the development of two micro-constructions in the history of English. The two exemplary structures to be discussed are the "It's all Greek to me" construction, and the "X is the Y of Z" (or simply XYZ) construction as in "Naples is the New York of Italy " (web).

"It's all Greek to me" probably began its life in the Middle Ages with a Latin comment on language competence: "Graecum est; non legitur" ('It's Greek, it can't be read'). This was picked up by Shakespeare (*Julius Caesar* I.2) in one of the first uses in English where it referred to Casca's real ignorance of Greek when listening to Cicero. From very early on, however, we witness some morphosyntactic variability in the construction, together with gradual shifts in meaning, towards a more general (and certainly non-compositional!) 'X is incomprehensible to Y' interpretation as "the job your husband has is Greek to you" (COCA).

The XYZ construction has its roots in Ancient Greek rhetoric and philosophy, but its linguistic history is more difficult to trace. In any case, just for "It's all Greek to me", we notice a considerable amount of variation in this construction today. Note, however, that in most cases the variability (and changes) rather happen on the semantic side of the construction; its morphosyntax is comparatively stable, which rather makes this an example of constructional change. However, interestingly, the construction is now even used in a metalinguistic kind of sense in order to create ironic and nonsensical effects, as in "Hugh Jackman is the Jennifer Garner of men" (web) or "Ebola is the Putin of Stalin" (web). At the same time, it also seems to have formed ties with other constructions such as "X is Z's Y" as in "Iraq is George Bush's Vietnam" (Fauconnier & Turner 2002). These developments also have to be accounted for in a constructional account of linguistic change.

In this paper I trace the minute changes for both these micro-constructions in contemporary and historical corpora of English (COCA; COHA; BNC, The Times corpus, The Red Hen Database and others) and discuss in how far speaker-hearers copy or manipulate the constructions and extend their original form and/or meaning. I will argue that studying changes in such micro-constructions (irrespective of how marginal and idiosyncratic they may seem to be) is not only interesting in and of itself. They also illustrate how constructional changes and constructionalization can interact, and more, importantly, how language variation and change can be captured from a constructional perspective, including the spread of constructions through the language and through the respective language communities.

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Language standardization, language practice and multilingualism: the case of German in Luxembourg in the 19th century

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This paper is situated in the greater framework of the standardization of German in Luxembourg in the 19th century. With a long history of multilingualism, Luxembourg constitutes a prime example for studying language standardization in a context of linguistic diversity. Standardization, roughly understood as the selection, codification, implementation and elaboration of language norms, has been mostly investigated in a monolingual or comparative perspective, but hardly at all from the point of view of language contact and multilingualism. Thereby, we assume contact between certain Germanic varieties (i.e. West-Moselle-Franconian and Colloquial German) on the one hand and between German and French on the other.

The analysis draws on a large corpus of texts of a hitherto largely neglected genre in studies on language history, i.e. historical public notices (2500 scanned and digitized public placards, chronologically and representatively sampled) published by the municipality of Luxembourg. Most of these notices are written in a two-column style in German and French (few also monolingual French or German), thus forming a bilingual parallel corpus, which is of unique value for language history studies (Claridge 2008).

Both, functional and systemic aspects are investigated to determine the effects of language policy on language use and vice versa in 19th century Luxembourg. The quantitative analysis of the corpus concerning language choices, for instance, gives an insight into actual language practice, i.e. how German was used in municipal communication and how its status changed over time. Interestingly, the first increase of monolingual German announcements starts after the defeat of Napoleon and the end of the French period (1814).

Regarding corpus standardization, processes of language variation and variant reduction are of interest. Moreover, given the historical context of multilingualism, replication processes and interferences can be regarded as additional sources for language variation. As lots of the public notices were (at least at the beginning when Luxembourg was under French rule) originally written in French and then translated into German, French is expected to have special influence. For the variation of the element order of the multipart conjunction *sowohl X als* (*auch*) *Y* ‚X as well as Y', for instance, a correlation can be observed with the correspondent French expression. Compare the two co-occurrences in i) and ii):

i) *dont les communes auraient complété leurs contingens de l'armée **et** de la réserve* <-> für *welche die Gemeinden das Contingent für die Armee **sowohl als** für das Reservekorps beschaft haben werden*

ii) ***tant** à cet égard **qu'**en ce qui concerne la conservation des minutes et généralement l'exercice de leurs fonctions* <-> ***sowohl** in diesem Betref, **als** in dem was die Erhaltung der Originalien , und ihre Amtsverrichtungen überhaupt betrifft*

Whereas the lexical material changes (within the concrete tokens), co-variation, i.e. pattern replication is evident. However, this correlation is limited to the initial period of analysis. From 1825 onwards, the discontinuous form (ii) is at the level of assertion, if not even the norm (cf. the codified form of present-day German in Duden 2009: 622), independent of the structure of the French equivalent.

Furthermore, for the realization of adverbial constructions to indicate the time of day in the German column a correlation with the form of the equivalent expression in the French column can be found as well (see iii) and vi) both designating ‚in the morning').

iii) *du* *matin* <-> *des* *Morgen-s*
PRART:MASK N(‚morning'):MASK.SG ART:NEUT.SG.GEN N(‚morning')-NEUT.SG.GEN

iv) (*le*) *matin* <-> *Morgens*
ART:MASK N(‚morning'):MASK.SG ADV (<N(‚morning')-NEUT.SG.GEN)

While the phraseological construction with solidified genitive like *des Morgens*, for example, is used in conjunction with French *du matin* (iii), the adverbalized monolexical unit without (genitive) article *Morgens* rather appears together with *le matin* or *matin* (iv). But again, this is valid only for the first decades of the 19th century. Around 1825 the proportion of the monolexical adverb starts increasing for the context with *du matin*, thus overriding the restriction to a certain French form. In the 1880s the phraseological construction is finally outbalanced - a development which has also been described for German in Germany (cf. Elspaß 2005).

Therefore, the results show how language practice, internal and contact-influenced variation go hand in hand.

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Preserving "Germanic" syntax via "exotic" means: V2 in modern Afrikaans

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All matrilectal varieties of modern Afrikaans (henceforth: *Afrikaans)* are firmly V2. This is often viewed as surprising, given the language's extreme deflection, speculation about the extent to which it represents a (de)creolized/creoloid variety (cf. its inclusion in *APiCS*), and significant contact with English throughout its history. This paper's purpose is, firstly, to highlight un(der)discussed aspects of Afrikaans's unique V2 profile: not only has Afrikaans preserved the patterns observed in Continental West Germanic, it has extended the contexts permitting verb-movement into the C-domain. Secondly, I consider what underlies both the preservation and the reinforcement and expansion of Afrikaans V2.

Afrikaans main clauses, like complementiserless embedded clauses, are obligatorily V2, a pattern familiar from German, but, significantly, out in Dutch (Zwart 1997). "Mainland Scandinavian"/MSc-type embedded declarative V2 (Vikner 1995, Julien 2007, 2009, Wiklund et al 2007, 2009) is also possible (Biberauer 2003, 2009). Thus Afrikaans has a distinctive embedded declarative V2 profile: while German and MSc mirror one another, the former requiring C-**drop** and the latter overt C-**realisation** to license embedded V2, Afrikaans permits both, the maximally generalized pattern.

Additionally, Afrikaans permits V2 as an option in embedded *wh*-structures, as in (1):

(1) a. *Ek wonder <u>wat</u>* ***eet*** *hulle saans* (***eet***).
I wonder what eat they evenings eat = 'I wonder what they eat in the evenings.'

b. *Ek sal uitvind <u>hoe</u>* ***kom*** *ons by die gebou in* (***kom***).
I shall out.find how come us by the building in come
'I will find out how we (can) get into the building.'

(1)-type structures are absent in full V2 languages (Diesing 1990). While (1a), V2 in the complements of *wonder*-predicates, is possible in some colloquial English varieties (Henry 1995, McCloskey 2006), (1b)-type structures, V2 in the complement of *discover*-predicates, are ungrammatical in such varieties. In Afrikaans, however, V2 is possible wherever predicates select clausal *wh*-complements. "Ripple-effect" V2, previously recorded for Hiberno varieties (Henry 1995) and also somewhat available in colloquial German (Müller 2010), is also very readily available in Afrikaans (with the less common additional possibility of optional multiple-spellout effects; du Plessis 1977):

(2) *<u>Wie</u>* ***dink*** *jy (<u>wie</u>)* ***het*** *Marie gehoor (<u>wie</u>)* ***het*** *Jan gesê (<u>wie</u>)* ***sou*** *die prys wen?*
who think you who has Mary heard who has John said who would the prize win
'Who do you think Mary heard John said would win the prize?'

Complementiserless interrogatives, too, then, systematically permit embedded V2. Further, many speakers permit V2 with an overt complementiser (Feinauer 1990, Oosthuizen 1994), a pattern not attested elsewhere in Germanic:

(3) *Ek wonder* ***of sal*** *hulle ons kom besoek?*
I wonder if shall they us come visit ='I wonder if they will come visit us.'

Thus Afrikaans V2 encompasses not just that attested in other Germanic languages, but also two unique interrogative V2 configurations.

Afrikaans's "über-Germanic" V2 profile originates, I argue, in 2 "exotic" innovations: clause-final negative concord marker, *nie*$_2$, and negative imperative marker, *moenie*.

(4) a. *Hulle koop nie*$_1$ *koerante* ***nie***$_2$.
they buy not newspaers POL = 'They don't buy newspapers.'

b. ***Moenie*** *jou paspoort vergeet* ***nie***$_2$*!*
must.not your passport forget POL = 'Don't forget your passport!'

Both arose during the early 19th century in the contact situation in which Cape Dutch was spoken, *nie*$_2$ as an emphatic tag resumptive used in communication with non-native Dutch speakers and subsequently incorporated in their speech (Roberge 2000), and *moenie* as a calque on Malay *jangan* (an initial negative imperative marker) and Asian Creole Portuguese *na/nu misti* ('not must'), once again in the mouths of non-native speakers (den Besten 1989, 1997, Ponelis 1993). Both features were incorporated into standard Afrikaans in 1925, as part of a conscious attempt, in the context of rising nationalism, to "engineer" the clear linguistic distinction between Afrikaans and Dutch required to accord Afrikaans independent official-language status. Having originated as a clause-external discourse element, *nie*$_2$ today instantiates a CP-peripheral Pol(arity) head (Biberauer 2008, 2012). In modern spoken varieties, it is also available as an optional emphasizer at non-clausal peripheries (Biberauer 2009, 2012). Following Biberauer (2014), I argue that systematic exposure to XP-peripheral, clearly a-categorial *nie*$_2$ led to an across-the-board reanalysis of Afrikaans CPs as PolPs:

(5) $[[_{\mathbf{CP[+v]}}\ [_{TP[+V]}\ \ldots]]\ nie_2] \rightarrow [_{\mathbf{PolP}}\ [_{CP[+V]}\ [_{TP[+V]}\ \ldots]]\ Pol]$

As PolPs, Afrikaans CPs are systematically "bigger" than Germanic V2-clauses (regardless of the locus of V2; see below). As such, V-to-C is always available without violating the so-called *Kayne-Rizzi-Roberts constraint* (McCloskey 2006), in terms of which a selected C cannot be occupied by a lexical element (which I connect to the V2 semantics proposed by Truckenbrodt 2006; *pace* Chomsky 1995 *et seq.*). This leads us to expect (1) and (2), and also the prolific availability of complementiserless embedded V2-structures, as well as the more restricted, matrix-predicate-regulated availability of MSc-style overt C-containing embedded V2 (across-the-board V-to-C in declarative complements, regardless of matrix predicate, would produce a semantic infelicity). Drawing on Holmberg (2013), and a "third-factor"-imposed acquisition bias, Input Generalisation (Roberts 2007, Biberauer 2011), in terms of which acquirers seek to maximize the features they have postulated on the basis of the input, we can further understand (3). Negative and interrogative Pol form a natural class, excluding affirmative Pol: non-veridical Pol. For speakers who allow (3), interrogative-marking clausal C-head *of* has merged with the already available, acategorial disjunction marker *of* ('or', 'either … or'), which is plausibly a spellout of acategorial Pol. While modern-day Afrikaans speakers generally have generalised the negation-specific finite-clause input pointing to the systematic need for a PolP-projection either (i) to all non-veridical finite CPs or (ii) to **all** finite CPs (I will discuss the diagnostics distinguishing these two extended-V2 grammars), those permitting (3) have additionally generalized over the *of*-specific input, postulating a single, underspecified (and hence acategorial) lexical item which can be merged in both C (the "standard" case) and Pol ((3)-type cases). More conservative speakers resist this reanalysis because they generalise the input they get for overt complementizers, treating all overt complementizers as the spellout of Force. Crucially, we see that Input Generalisation has affected all speakers of modern-day Afrikaans, with the difference between them being the pattern that serves as the basis for their extended generalizations.

Moenie, too, has played a key role in determining the retention of Afrikaans' V2 character. The prescriptive imposition of this prohibitive marker eliminated Dutch's OV directive infinitive (*Het geld niet vergeten!*, i.e. the money not forget.INF = 'Don't forget the money!') and replaced it with a structure which signals **both** the OV- **and** the V2-character of Afrikaans main clauses. Even in heavily English-influenced Kaaps, *moenie* is completely incompatible with the VO orders that are possible in many non-imperative contexts: although it is today unambiguously a negative-imperative Force-marker (it is impossible in verbal clusters, and thus evidently not merged in the position of a deontic modal), speakers clearly still analyse it as an element that parallels finite verbs which raise to C. Unintentionally, then, Afrikaans's early 20th-century "language engineers" constructed a, from an acquisition perspective, highly salient structure that was extremely well designed to ensure the preservation of Afrikaans's characteristic West Germanic word-order profile!

Noun phrase internal word order developments in Early Germanic

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It is generally recognised that substantial changes to word order have taken place between the early stages of Germanic languages and present-day varieties. The changes have traditionally been described as a development from relatively free word order to firmer ones. In the past decade, however, a considerable body of research has focused on establishing that the order in the earlier stages was not 'free', but rather determined by information structure. The detailed work so far carried out has focused largely on clauses, and in particular the order between the lexical verb and other sentence elements (see for instance articles in Hinterhölzl & Petrova 2009; Ferraresi & Lühr 2010; Batllori & Hernanz 2011; Meurman-Solin et al. 2012; Bech & Eide 2014).

Less attention has been paid to word order within the noun phrase, though it is clear that there too the order was less rigid than in modern varieties (Allen (2012) and Breban (2012) analyse the role of information structure in the development of noun phrases in English, but not with respect to word order). The purpose of this paper is to consider Old Norse (ON) and Old English (OE) noun phrase internal word order, particularly the adjective-noun order, and the factors that influenced it. Though both ON and OE permitted discontinuous noun phrases, these will not be considered here.

For both ON and OE, it is recognised that stylistic factors play a role in determining order, and in addition, adjectives frequently flank the noun. Still for each language, one position is deemed to be neutral and the other somehow marked. The remarkable thing is that what is assumed to be the neutral position varies between the two languages, in spite of their modern similarities in this respect and their common ancestry (Lehmann (1972) argues for A–N being the neutral order in Proto-Germanic).

Standard works on ON that comment on noun phrase internal word order generally describe the postnominal position as neutral for modifiers, with prenominal position being associated with emphasis (e.g. Iversen 1972; Valfells & Cathey 1981:28; Faarlund 2004:67-8). In OE, on the other hand, the

prenominal position is deemed to be neutral and the postnominal one somehow marked (Mitchell 1985; Fischer et al 2000:46).

Three recent works on OE, provide interesting discussion of adjective-noun order, the factors that influenced it and the interaction with the distribution of the weak and strong inflection of the adjectives (Fischer 2000; Pysz 2009; Haumann 2010). However, the three accounts do not arrive at the same conclusions and none of them provides detailed quantitative data. The fact that the three studies are written within different theoretical and terminological frameworks also makes it difficult to compare and evaluate claims.

In this paper, we will report on a pilot study of two corpora of OE and ON texts, respectively. We have extracted examples of noun phrases containing attributive adjectives, with 'attributive' taken to be a structural term, referring to noun-phrase internal positioning and contrasting with predicative position (*pace* Fischer 2000 and Haumann 2010, where the term is also assumed to refer to a semantic type of modification). Each noun phrase is coded not just for adjective positioning, but also adjectival inflection and syntactic (and for ON morphological) definiteness marking.

We show that the factors that have been assumed to determine the position of adjectives synchronically, at least in Germanic and Romance languages, are at play also in the earlier varieties of Germanic, though they have different effects in ON and OE. The factors include: non-restrictive vs restrictive modification; reference vs referent modifying; individual- vs stage-level modifying (cf Bolinger 1967; Sadler & Arnold 1994; Cinque 2010 and many others). We show that Cinque's assumption that all semantic properties necessarily go together so as to create only two possible combinations of properties does not appropriately account for the differences in distribution in ON and OE. Instead we show that the factors do determine preferences for word order, but that there is no absolute correlation. Furthermore, the different semantic factors may sometimes be in conflict and hence pull in different directions. Cinque (2010) also argues that the different semantic types of modification are related to positional differences, as does Haumann (2010). We argue that there is no structural evidence in either OE or ON for assuming that postnominal attributive adjectives are not noun-phrase internal. In this respect, we consider the advantages of extending Sadler & Arnold's (1994) analysis of prenominal adjectives in modern English to OE and ON.

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Diverging results in the grammaticalization of lat. *Antea*

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Our aim is to explore the different paths of grammaticalization of the Latin adverb ANTEA in different Romance languages with special attention to Spanish and Italian. The selection of these two languages is motivated by the fact that Lat. ANTEA follows partly convergent and partly divergent paths through their history. Hence, a contrastive perspective may broaden our thoughts on what factors are at play when the diffusion of a grammaticalization process is blocked. Based on data gathered mainly from the large digital historical corpora available for both languages (CORDE for Spanish and OVI and DIACORIS for Italian), but also from other printed sources, we will illustrate how in the case of Italian Lat. ANTEA follows a standard process of grammaticalization based in a metaphorical semantic change (Portolés 2000): from a spatial deictic meaning in its adverbial function to an abstract priority in the organization of relevant discursive topics which explains the discursive functions of It. *anzi* in contemporary Italian (Bazzanella 1995, 2003).

Following Aijmer and van den Bergen (2011), we deem necessary to distinguish between a nuclear constant procedural meaning and a pragmatic variable conceptual meaning in order to explain the desemantization at the base of the grammaticalization process (Brinton 1996). In this case the procedural meaning of priority is maintained while the conceptual meaning of spatial position is blurred. This semantic change allows a reanalysis and reassignment of new functions:

(a) *anzi* functions as non-paraphrastic reformulation marker indicating that the speaker has reorganized the information and presents a more relevant claim in a second communicative move.

(1) *Chiami uno studente, anzi una studentessa* 'Call a male student, or better a female student'

However, contrary to other reformulation markers (like *cioè, ovvero, ossia*), in most cases what precedes and what follows *anzi* can be ordered on a scale, i.e. both are co-oriented arguments pointing to the same conclusion, but the second one does it in a more emphatic way as can be seen in (1):

(2) *Non mi piace il calcio, anzi lo detesto* 'I don't like football, rather I hate it'

In these cases, *anzi* fulfills two different functions: non paraphrastic reformulation and connection between utterances, establishing a scalar additive relationship between them (Saiz 2014).

(b) *anzi* also functions as a kind of adversative connective presenting a claim opposed to what can be inferred from what has been previously said. For example, in (3) the hearer could deduce from the first utterance that he has to come by his own from the airport, but this inference is canceled by the second utterance:

(3) *Dall'aeroporto puoi prendere la metropolitana, anzi vengo a prenderti io con la macchina che è più semplice* 'You can take the tube from the airport, but rather I come with my car to pick you up, which is easier'

Within this function a further pragmaticalization process has made possible to use it in isolation as a reactive answer in conversation: *Anzi*! similar to German *doch*

(3) - *Non sei contento che tua figlia si sposa* 'You are not happy that your daughter is getting married'

- *Anzi!* 'Of course!'

In the case of Spanish *antes* the process followed a similar path, as at least function (a) is frequently attested in Old and Classic Spanish texts (Azofra 2010). However, such uses of *antes* were abandoned throughout Early Modern Spanish (1675-1825). Actually, Contemporary Spanish *antes* has mainly an adverbial function and a deictic meaning denoting priority in both spatial and temporal dimensions. The adversative meaning (stronger than in It. *anzi*) has only survived in the adverbial phrase *antes bien* which functions as discursive connective. We will therefore explore the adverbial combinations in which adversative *antes* has proved more resistant. Finally and more generally, we will attempt to determine the factors behind the different variational status of *antes* and *anzi* that might account for such a divergence in diffusion and further development emerging quite late in history from an otherwise shared grammaticalization path.

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The genitive-accusative syncretism and the development of long-form Russian adjectives

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The history of the adjective in Russian manifests the conversion of its declensional paradigm with that of non-personal pronouns. The proposed paper concentrates on a particular case ending, namely the masc. sg. *-ogo*, as in *dobrogo* 'good' (Mod. Russ. *-ovo*) – the syncretic genitive and accusative (animate) form that begins to appear in the Old East Slavic texts around 13th c. (Gippius 1993:68) This ending is traditionally considered the result of the initial compounding of the so-called short-form adjective (belonging to the nominal paradigm) and the anaphoric 3rd pers. pronoun **j-* and subsequent grammaticalization of the latter: *dobra-jego* > *dobraego* > *dobraago* > *dobrago* 'the good one', driven by definiteness. A series of phonological changes in the ending, such as the loss of intervocalic /j/, vowel assimilation and contraction, was presumably followed in East Slavic by an analogical change. This was the substitution of the long-form *-ago* ending by *-ogo*, the ending of non-personal pronouns, in turn modeled on the genitive-accusative of the interrogative pronoun *kogo*

'whom'. The discontinuity between the original compound form *dobrajego* and the eventual reflex *dobrogo* warrants another look at the problem. The hypothesis put forward in this paper is that, while the change may have taken the compounding route in some cases of the paradigm, the development may have not been quite so linear in others, particularly, in the accusative case. As has been pointed out in previous research, the adjectives in which this ending is first attested are, in a sense, more "pronominal" than others. For example, Gippius (1993) examines the lexical meaning of the adjectives in question in an attempt to explain the gradual proliferation of the pronominal endings in the sg. paradigms in ESl by the strong semantic affiliation of some adjectives with non-personal pronouns. It is proposed in this paper that the primary criterion is that they are used with reference to persons. The ending *-ogo* was not the 'new' substitute for the 'old', genitive, *-ago*, as has been generally assumed, but rather a variant accusative form used under certain syntactic conditions, and for a certain lexical and semantic classes of adjectival stems. There are several factors (lexical, morphological, syntactic, and semantic) that seem to point in this direction. Thus in certain short-form adjectives there may have emerged an alternative accusative ending, modelled directly on *kogo*. and independently of the long-form development. This occurred in the same manner as the rise of genitive-accusative in non-personal pronouns, and what is most important – before genitive-accusative syncretism was established in nouns, and before the long-form compounding took over.

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Una volta: Building up temporal subordinators in Romance

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In recent years some authors as Brucart and Gallego (2009), Pavón (2010) or Haegeman (2012), among others, have proposed that the internal structure of adverbial subordinators do not constitute a specific formal class but can be derived from the same mechanisms used in the relative and completive subordination. Therefore, the adverbial interpretation is built compositionally from the combination of various features associated with the adverbial subordinator. According to this proposal, the aim of this paper is to analyze the internal structure of the temporal subordinate element *una volta* (*che*).

In modern Italian, Catalan, Spanish and Portuguese temporal phrases *una volta, una vegada, una vez* and *uma vez* can have different interpretive values, generally associated to different syntactic positions, as the examples in Italian show:

(1) a. Lessi *Guerra e Pace* una volta$_1$.
'I read *War and Peace* once.'

b. Una volta$_2$ lessi *Guerra e Pace*.
'Once I read *War and Peace*.'

c. Una volta$_3$ letto *Guerra e Pace,* m'innamorai dei romanzieri russi. - Una volta$_3$ che terminai di leggere *Guerra e Pace,* mi preparai una tisana.
Once read *War and Peace,* I became keen on Russian novelists. - Once that I finished reading *War and Peace,* I got an infusion.

In (1a) *una volta* has a frequency value which is witnessed by the fact that these elements can be substituted by *due volte* (twice), *molte volte* (many times) or appear in constructions such as *più di una volta* (more than once) and *una volta al giorno* (once a day). In (1b), instead, the same phrase does not display these properties and its interpretation refers to a certain point or interval of time in the past, synonimous to *long ago*. Finally, in (1c) *una volta* is a connective element that introduces temporal adverbial constructions, similar to *after*, *when* or *as soon as*. In fact, while *una volta$_1$* can cooccur with these elements, (2a), *una volta$_3$* cannot, (2b):

(2) a. Dopo che/ Quando lessi *Guerra e Pace* una volta$_1$ …
After that/ When I read *War and Peace* once…

b. *Dopo che/ Quando una volta$_3$ che terminai di leggere *Guerra e Pace*…
After/ When once that I finished reading *War and Peace…*

The ungrammaticality of (2b) shows that *Dopo, Quando* and *una volta$_3$* compete for the same syntactic position. *Una volta$_3$* can instead cooccur with *una volta$_1$*, (3):

(3) Una volta$_3$ che terminai di leggere *Guerra e Pace* una volta$_1$,...
Once that I finished reading *War and Peace* once,…

We propose that the different interpretations seen so far are due to the different internal structures, differently from what Kayne (2014) proposes for *once* in English. In addition, we suggest that these three different interpretations, which also explain the different positions that *una volta* occupies in the sentence, are due to a grammaticalization process. This process starts from the frequency form *una volta$_1$* and develops into *una volta$_2$.* Then, the 'existential' form *una volta$_2$* develops into the subordinating element *una volta$_3$*.

This process of grammaticalization is clear in Spanish and in other Romance languages such as Catalan and Portuguese. In Spanish, for example *una vez$_1$* appears in the language from the beginning, while the 'existential' form *una vez$_2$* is only found from the 13th century and the form *una vez$_3$* is not documented until the15th and16th centuries, (4):

(4) a. Esto non fue *una vez*$_1$, mas muchas. [*Fazienda*, c 1200, CORDE]
This wasn't once, but more times

b. Et acaesció que ovo *una vez*$_2$ aquel señorío un omne que fue de mejor entendimiento et más apercebido que los que lo fueron ante. [*Lucanor*, 1325 – 1335, CORDE]
And (it) happened that there was once that…

c. *Una vez*$_3$ acabado esto, se debe proceder de inmediato a la segunda intención, [Álvarez Chanca, *Tratado nuevo*… 1506, CORDE]
Once finished this…

In Italian, on the contrary, both *una volta*$_2$ and *una volta*$_3$ are already found at the end of 13th century, (5):

(5) a. Unde avvenne *una volta*$_2$ che quello re volse parlare a un suo barone, il quale avea servito longamente … [Anonimo, Egidio Romano volg., 1288 (sen.), OVI]
…happened once that that king wanted to speak to…

b. Ma *una volta*$_3$ cominciata la battaglia di Cartagine, … [Bono Giamboni, Orosio, 1292 (fior.), OVI]
But once begun the battle of Carthage,…

As for the internal structure of the three forms, we propose, respectively, that the frequency form *una volta*$_1$ corresponds to a QP whose head contains the cardinal *una* (one), which selects, in turn, [volta]$_{\text{Time}}$. It is for this reason that this form is in complementary distribution with *due volte* (twice) and display the properties presented above. As for *una volta*$_2$, we suggest that the cardinal *una* reanalyses as the indefinite determiner, and so the phrase would correspond to a DP. In fact, in these case it is not possible to obtain a cardinal interpretation. In addition, given the following correspondence:

(6) a. Una volta$_2$ lessi *Guerra e Pace* (Once I read *War and Peace*)

b. In un punto nel passato lessi *Guerra e Pace*
In a temporal point in the past I read *War and Peace*

we persue the idea, adopting Cinque (2010) and Kayne (2003, 2014,) that this DP is the complement of a silent preposition AT, (7):

(7) $[_{\text{PP}}$ AT $[_{\text{DP}}$ una $[_{\text{SN}}$ volta]]]

This phrase occupies the weak focus position in the sentence. Finally, *una volta*$_3$ is a temporal connective phrase merged as a SpcForceP introducing the temporal subordinate clause.

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Perceptual Ambiguity and the High German Tenues Shift

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This presentation argues two points: first, that the stages traditionally reconstructed for the High German tenues shift (Braune 1874, see Wilmanns 1911, Prokosch 1933, Nordmeyer 1936, Penzl 1971, Mettke 1983, Paul 1989, and Goblirsch 2005) may have been phonologically abrupt. Rather than having been realized as a series of imperceptible changes, as the Neogrammarians suggested, affrication and spirantization may have actually occurred in discrete phonological steps (see Kiparsky 1988 and 1995). Variation between each of the stages was probably imperceptible, but the distinctive phonological changes probably occurred rather abruptly. Second, I claim that perceptual ambiguity in weak position (post-vocalically for old simplex stops) is responsible for the absence of affricates there in the textual record and in modern German dialects.

As Ohala (1992: 246-47) argued, the allophones of a given phoneme do not capture the full range of phonetic variability available for it. Listeners, he noted, subconsciously correct phonetic variation all the time. In other words, when listeners hear a sound that is phonetically close enough to a given phoneme, they perceive the sound as the phoneme itself. When this kind of "perceptual normalization" (see Kuhl 1991, Sendlmeier 2000, and Yang 2006) fails, i.e., when listeners fail to adjust for minor variations in the speech that they hear (hypo-correction), phonological change can occur. In the case of the tenues shift, once /p/, /t/, and /k/ became aspirated, their constriction duration could have gradually shortened. Listeners would have corrected what they were hearing (unconsciously), so that their perception of the sounds in question remained /p/, /t/, and /k/. Once perceptual normalization broke down, /p, t, k/ were re-categorized as /pf, ts, kx (x)/, setting the distinctive component of the shift in motion.

This kind of perceptual account helps capture the reason for the absence of affricates in weak position (with the possible but unlikely exception of *kraits*-forms in Luxembourg, which are probably the regular development of old geminates; see Simmler 1974 and Schützeichel 1976). If there was not a salient perceptual distinction between affricates and fricatives in weak position in pre-Old High German, scribes may have tended to represent either sound as a fricative in writing. Eventually, speakers may have ceased to pronounce affricates in that position.

Modern Liverpool English provides compelling evidence that affricates and fricatives may exist in near free variation post-vocalically. For the Liverpool shift, Honeybone 2001 reported some preference for one process over the other in certain positions; for example, spirantization of /t/ and /k/ was more common word-finally and medially after stressed vowels, whereas affrication was more common medially before stressed vowels. Nevertheless, both processes were possible in all positions (Honeybone 2001: 238). Although Honeybone's reconstruction of the process parallels the traditional

reconstruction of the High German tenues shift (with affrication before spirantization), from a synchronic perspective it appears that affricates and fricatives exist as doublets. It is possible that speakers of Liverpool English do not distinguish the two sounds perceptually, just as speakers of pre-Old High German may have failed to distinguish /pf, ts, kx/ from /f, s, x/ post-vocalically for old short stops.

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The nature of 'irregular', 'sporadic' sound changes is one of the key issues in historical phonology since at least the Neogrammarians. They are often ascribed to non-phonological reasons, as analogy or borrowing, or to the non-(purely)-phonological mechanism of lexical diffusion. My goal is to show that a 'sporadic' sound change in the historical phonology of Tuscan – namely the voicing of some intervocalic voiceless stops – was not due to borrowing (as often argued), but to a variable and allophonic voicing rule, whose output was subject to partial phonological re-categorization.

While most instances of Latin intervocalic [k, t, p] remain voiceless in Tuscan, several Tuscan words display the outcomes [g, d, b/v] (Ex. 1). Two classical alternative explanations exist. According to the former, intervocalic voicing was a regular sound change in Tuscan, but the cultural prestige of Latin caused massive learned restoration of voiceless segments (Merlo 1941). According to the latter, Tuscan preserved voicelessness, while words with voiced outcomes were borrowed from languages (northern Italian vernaculars, Old Occitan and Old French) belonging to the so-called 'Western' branch of Romance, in which intervocalic stop voicing had been systematic (e.g. Rohlfs 1966).

Both hypotheses have several weaknesses (see Izzo 1980, Giannelli & Cravens 1997). I want to argue that 1) (most) voiced outcomes are due to sound change, not borrowing: they show phonological conditioning, with properties unattested in Western Romance; 2) the fine-grained phonological variability of this phonological conditioning suggests that voicing in Old Tuscan was not a categorical and obligatory process, but rather a variable and gradient phenomenon (as already proposed by e.g. Giannelli & Savoia 1979-80, Maiden 1995, Cravens 2002; still today some peripheral areas of Tuscany have an allophonic process that creates breathy, slack voiced and even occasional fully voiced intervocalic stops).

To test these hypotheses, a list of Tuscan words, containing at least one intervocalic voiceless stop in their Latin etymon, was obtained from the *OVI* online corpus of medieval Italian texts. Learned words and clear borrowings from other Romance languages were excluded; then the intervocalic stops in the remaining words were classified with respect to several phonological parameters. It was found that Latin voiceless stops were more likely (at a statistically significant level, applying a generalized linear model) to become voiced in Tuscan *i)* the more the preceding vowel was open, *ii)* the more the following vowel was open, *iii)* if one of the adjacent vowels was stressed. Finally, *iv*) velars underwent voicing much more frequently than coronals, which in turn were voiced more frequently than labials (*ii* and *iv* are shown in Fig. 1). Interestingly, the likelihood of a voiced outcome does not increase in a linear manner. An overall measure of 'strength of voicing environment' was created combining the four factors that conditioned voicing; it emerges that even for fairly large increases in this measure the probability of a voiced outcome remains quite low, then it rises rather abruptly (Fig. 2).

While there is no obvious way to explain the phonological asymmetries discovered if lexical borrowing is assumed (in the supposed donor languages all intervocalic stops were regularly voiced), they are consistent with an allophonic voicing process, gradiently influenced by several phonological factors. Also, Fig. 2 shows that there was a non-linear relationship between the degree of stop voicing (estimated determining for each stop the overall effect of the four phonological parameters on the likelihood of a voiced outcome) and its actual categorization as either a [–voiced] or [+voiced] outcome, as predicted by the Quantal Theory of Speech (Stevens 1972). This may explain why,

although the phonetic overlap with phonologically voiced stops plausibly was not complete, reanalysis occurred: voicing was allophonic but presumably strong enough to cause perceptual uncertainty, especially in environments that favoured voicing most.

fuoco 'fire' < FOCU(M)	*prato* 'meadow' < PRATU(M)	*siepe* 'hedge' < SAEPE(M)
lago 'lake' < LACU(M)	*strada* 'road' < STRATA(M)	*riva* 'river bank' < RIPA(M)

Example 1

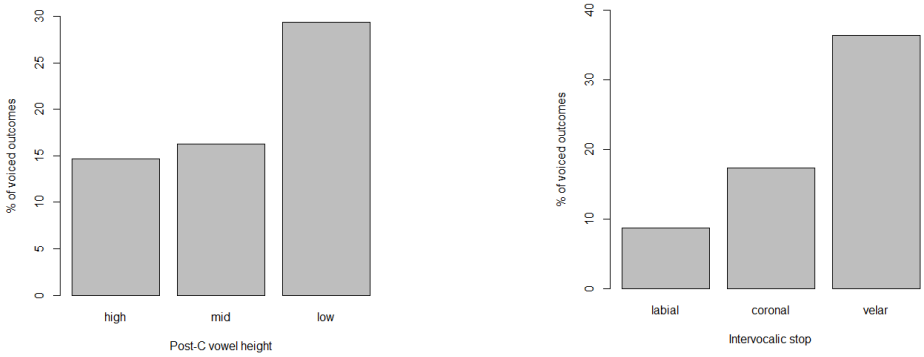

Figure 1

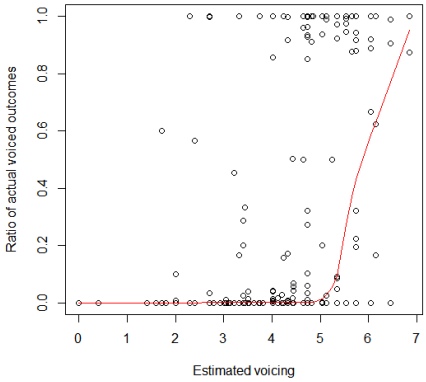

Figure 2 – Smoothing function *lowess* superimposed

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Paths of grammaticalization in Romance voice systems

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In this talk I will discuss some aspects of the grammaticalization of lexical verbs as passive auxiliaries in Romance and the reanalysis of reflexives as voice markers, focusing on the diachronic relationship between auxiliation and serialization, and the direction of the changes, trying to detect general and areal features of the grammaticalization patterns investigated (Bisang 2008; Heine & Kuteva 2011, among others).

More specifically, I will consider the grammaticalization of some motion (COME), activity (DO/MAKE) and change of state (BECOME) verbs in the transition from Latin to (Italo-)Romance, in relation to the status of serial/light verbs — whether intermediate stages in the auxiliarization process (Rosen 1977, Giacalone Ramat 2000, among others) or a different syntactic category (Butt 2003) — and to the linearity of the relationship between serial verb and auxiliary (following the path verbal lexeme > serial > auxiliary) (Heine 2003, Hopper & Traugott 2003 and recent discussion in Bisang 2011, Börjars & Vincent 2011, among others).

I will argue that, although characterized by maximal desemanticization on a par with auxiliaries, the serial uses of the verbs under investigation in (Italo-)Romance seem to exhibit a different type rather than a reduced degree of decategorialization. I will also show that the relationship serial verb-auxiliary is non-linear: the same lexeme, in fact, can have simultaneously auxiliary and serial uses, the latter developing, for some verbs, after their auxiliary uses (Cennamo 2006, 2007).

Other types of grammaticalization instead, appear to follow a linear path, like the reanalysis of the reflexive morpheme as a voice marker, proceeding from anticausative to passive and optionally to an impersonal/indefinite reinterpretation, the latter attested to a different degree in Romance (Cennamo 1993, 2014, forthc,). Evidence for this claim is also given by changes currently taking place in Brazilian Portuguese, involving the loss of the reflexive as a passive marker, whilst its impersonal/indefinite function is retained and widely used (Cyrino 2007, 2013).

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Greek and Romance in Southern Italy: a syntactic phylogeny

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Goals. In this paper we use modern parametric syntax to explore historical relations across Romance and Greek dialects in Southern Italy, and in particular to address two questions which are usually investigated by traditional dialectology and historical linguistics mainly through the analysis of lexical data: **1.** Can parametric syntax help reconstruct a plausible phylogeny for Greek and Romance varieties in Southern Italy? **2.** Can parametric syntax identify the amount of contact among such varieties?

Methods. Our central analytic tool is the Parametric Comparison Method (PCM, Guardiano and Longobardi 2005, Longobardi and Guardiano 2009), which computes parametric distances among sets of languages and prompts the automatic construction of phylogenies. The PCM opens the possibility of combining insights from formal grammar, historical-comparative linguistics, quantitative sociolinguistics (dialectometry), and computer-assisted techniques to study vertical and horizontal transmission of languages (Longobardi et al 2013).

Data and experiments. Southern Italy is an ideal testing ground, for long-known historical and sociolinguistic reasons. In this area, we collected syntactic data from the nominal domain in seven Romance varieties (three in Sicily: Ragusa, Mussomeli and the Gallo-Italic dialect of Aidone; two in Calabria: Reggio Calabria and Verbicaro; one in Salento, and, finally, standard Italian), four Greek ones (the two Greek dialects of Southern Italy: Salentino Greek and Southern Calabria Greek; Cypriot and standard Modern Greek), and their ancestors (Latin and two varieties of Ancient Greek); after computing parametric distances (using the PCM), we built syntactic trees and networks, and performed various statistical experiments; subsequently, to pursue a comparison between the historical development of lexicon and syntax, we measured the results of comparative syntax against those produced by lexical data (collected using a 207 Swadesh list, along the model of Dyen, Kruskal, Black 1992). Based on these analyses, we were able to study the degree of correspondence between both phylogenies (the lexical and the syntactic one) and the relative impact of borrowing on either of them.

Results. It is possible to argue that parametric information alone is a good predictor of the genealogical histories of Greek and Romance in Southern Italy, in spite of some detectable but controllable amount of secondary convergence, affecting syntax as well as the vocabulary.

In none of our experiments, indeed, is the impact of contact such as to obscure the very genealogical relations among the varieties examined: the Romance group is systematically classified separately from the Greek one (even when ancient languages are included). Furthermore, the internal classification of the two groups resembles the areal distribution of the varieties: within Romance, the Southern varieties are separated from the rest, and, within the Southern cluster, the three dialects from Sicily are kept together (showing syntactic uniformity, as opposed to non-Sicilian dialects). Similarly, within Greek, the two dialects in Southern Italy are kept apart from Cypriot and Modern Greek.

A closer inspection of the distribution of parameter values shows that some particular subdomains are particularly sensitive to areal constraints, while others are more homogeneous diachronically (Guardiano 2014).

On the all, parametric contact happens to be monodirectional, from Romance into Greek (Ledgeway 2013). However, there are also parametrically identifiable traces of a micro-linguistic area. For instance, within the subdomain of adjectival modification (Guardiano and Stavrou 2014), the Greek and Romance dialects of Southern Italy share identical parameter values, as opposed to the rest of Greek and Romance, respectively: such a dialectal micro-area presumably results from contact events.

As a counterpart, other parameter subsets are distributed more uniformly, both diachronically and synchronically, within each genealogical group.

Conclusions. We claim that it is plausible to identify selective subdomains of syntax that are more sensible to contact-induced parameter resetting or, vice-versa, more impermeable to the pressure of contact: however, our crucial conjecture is that this must be always relativized to the general parametric layout of the languages in contact.

This way, we conclude that the PCM can not only be used for the purpose of long-range historical comparisons, but also successfully implemented as a device to describe and explain microvariation at a local and chronologically shallower level.

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Uses of MIN ('from') in Traditional Negev Arabic

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The primary meaning of the Arabic preposition MIN is 'from' (Procházka 1993; Esseesy 2010). But both experimental elicitation and corpus analysis (Henkin 2010) of the Traditional Negev Arabic (TNA) prepositional system show that MIN also expresses non-ablative dynamic and static spatial relations. These other meanings of MIN surface exclusively when combining MIN with a restricted set of projective prepositions (*giddām*, 'in front of'; *wara* 'behind'; *fōg* 'above'; *taḥt* 'under'; *jāy* 'toward observer' and *ġād* 'away from observer'). A similar combination has been detected by Mackenzie (1978) for its etymological Hebrew cognate *me-/mi-*, used in prepositional compounds like *me-ʾaḥor(a)* 'behind', *mi-qadima* 'in front', *mi-taḥat* 'under'. In particular, Hebrew *me-/mi-* combines with *yamin* 'right' and *ṣmol* 'left', These, however, are not grammaticalized as spatial prepositions in TNA, which has a unique set of Frames of Reference (FoRs), distinct from that of Hebrew.

Significantly, in TNA not all projective prepositions combine with equal frequency with MIN: *janb* 'flank>side' combines predominantly with *ʿa-* 'in/on/at/to', very rarely with *fī* and *MIN*; in Hebrew we have *be-tsad and le-tsad* 'beside'. The low compatibility of *janb* with MIN in TNA is due to the relatively non-grammaticalized status of the former with respect to *giddām*, *wara*, *fōg* and *taḥt*, all full prepositions with no nominal counterpart. Consistently with this observation, although TNA uses the Absolute FoR and the four cardinal directions in projective prepositions, MIN combines with them primarily in ablative meanings: *min šarg* means only 'from east'. Indeed, the prepositions indicating the four directions *šarg* 'east', *ġarb* 'west', *šimāl* 'north' and *giblih* 'south'– as happens to *janb* 'flank-side'– synchronically represent nouns as well.

To summarize, within the domain of TNA projective spatial relations, MIN combines predominantly with fully grammaticalized prepositions which have no nominal origin or counterpart: polysemy is thus avoided and their nominal value increases in some specific circumstances with respect to their prepositional function. Lacking a nominal origin, these prepositions need MIN as an external source in order to drive them to a nominal stage.

The main question is what criteria do TNA speakers use in dynamic contexts to choose between simple projective prepositions (F+ motion verb + *giddām/ wara* G[2]) and projective prepositions in combination with MIN (F+ motion verb + MIN *giddām/ wara* G).

From experimental data, elicited by showing speakers short videos, it appears that simple projective prepositions are used when the direction of motion of Figure and Ground objects are ALIGNED, while the compounds of MIN + Projective Prepositions are generally used when the directions of orientation and/or motion of Figure and Ground objects are not coincidental, ranging from a slight deviation to full perpendicularity, where two trajectories cross each other.

[2] G means Ground object and F Figure object. G is the object with respect to which F is located in space and F is the entity to locate, according to Levinson (2003).

These results show that the criterion of ± F-G [ALIGNMENT] determines the selection of MIN + Projective Prepositions.[3]

It seems that in TNA, when in a given spatial array the trajectories of F and G axially diverge, the force of the directionality of the entire array is diminished with respect to the salience of the Region of G where the trajectories meet each other.

When trajectories meet or even cross each other, MIN works as a 'nominalizer' transforming the originally non-nominal Projective Prepositions into topological entities.

In these cases, the use of MIN + Projective Prepositions excludes syntactically the presence of the Ground object after the preposition, both as noun and as suffixed pronoun.

Furthermore, in TNA, the distribution of MIN+ Projective Prepositions follows the patterns of matching between Projective Prepositions and G-Objects (Cerqueglini & Henkin forthcoming). Therefore, we admit here hypothetically a different source of grammaticalisation of non-ablative uses of MIN, other than a particular category of objects (as described in Luraghi 2009 for Italian). In TNA, it should be assumed that the origin of LOCATIVE MIN is due to the attention that TNA speakers generally pay to directional criteria in spatial arrays, which determines many aspects of their dynamic and static cultural experience of space.

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Generating V_{fin}-IO(Dat)-DO(Acc)-$V_{non\text{-}fin}$ Orders in Old English and Old Icelandic

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[3] In the light of a unifying perspective of TNA spatial experience, the same criterion of F-G [ALIGNMENT] has been proved relevant in TNA also in determining the choice between Relative and Absolute FoR (Cerqueglini & Henkin, forthcoming).

Within a *post-Minimalist* syntactic framework, this paper revisits the core properties of *Scrambling* and some basic assumptions regarding such properties. The proposed analysis has its focus on V_{fin}-IO(Dat)-DO(Acc)-$V_{non\text{-}fin}$ orders in O(ld) E(nglish) and O(ld) Ice(landic) and seeks to pin down the ways these core properties interface with semantic/discourse/informational/prosodic factors. Data from two corpora have been considered: *The York-Toronto-Helsinki Parsed Corpus of Old English Prose* (Taylor, Warner, Pintzuk, Beths 2003) and the corpus of *Íslendinga Sögur* (Kristjánsdóttir, Rögnvaldsson, Ingólfsdóttir, Thorsson 1998).

The current study is based on theoretical assumptions borrowed from sources in the area of the movement approach to *Scrambling* (and *Object Shift)* phenomena (e.g. Roberts 1997a & 1997b and Haeberli 1999 & 2002 for OE; Haugan 2001 and Hróarsdóttir 2001 for OIce; as well as Thráinsson 2001; Bobaljik 2002; Jonas 2002; Richards 2004; Wallenberg 2009).

When both internal Arguments move out of their source positions, the analysis can be carried out along alternative routes, cf.:

i) Both objects end up in the specifier position of the AgrOP which is situated VP externally.

ii) The indirect object moves into the specifier position of the 'higher' AgrOP ($AgrO_iP$) and the direct object moves into the specifier of the 'lower' AgrOP ($AgrO_dP$) and both AgrOPs are VP external.

iii) The indirect object surfaces in the specifier of the VP external AgrOP ($AgrOP_1$) and the direct object surfaces in the specifier of the VP internal AgrOP ($AgrOP_2$).

iv) Both objects target XP-adjoined positions in the domain above VP.

i) above assumes complex leftward movement of both internal Arguments while ii) and iii) rely on non-complex individual movements of the internal Arguments, but what the proposals in i), ii) and iii) share in common is that movement is motivated by the need for both internal Arguments to have their case-features checked. I argue for a non-case-feature triggered account of *Scrambling* in OE and OIce, mainly along the lines of iv). My proposal stands as an alternative to the weak version of semantic/discourse/informational analyses (whereby topic and focus are purely semantic features accessible at the interface) and it does not side with their strong version (whereby Topic and Focus attract movement of constituents to dedicated functional projections) either.

Scrambled orders in OE and OIce canonical V_{fin}-IO(Dat)-DO(Acc)-$V_{non\text{-}fin}$ constructions are straightforwardly accounted for as involving leftward movement of both direct and indirect object into phrasally-adjoined positions in the left periphery of vP/VP, e.g. 1). More intriguing and pertinent to the analysis prove to be non-canonical orders like 2)-4), cf.:

1) OIce Og ef eg má þér ráð gefa, bóndi minn, (IngArn 3692)
'And if I may give you counsel, my lord,'

2) OIce ... að eg vil öllum yður grið gefa skipverjum. (Laxd 1564)
'... that I will give mercy to all of your shipmen.'

3) OE Nyle se Waldend ænġum ánum ealle gesyllan gæstes snyttru. (Cri 683)
'The Ruler will not give to anyone alone all the wisdom of the Spirit.'

4) OE Nu wille ic þeah be suman dæle scortlice hit eow sum asecgan. (VercB 50)
'Now I will though in part and in short tell you some of it.'

V_{fin}-DO(Acc)-IO(Dat)-$V_{non\text{-}fin}$ orders (5)-7)) are analyzed by way of counter examples, cf.:

5) OIce Vil eg það ráð þér gefa sem hverjum öðrum ... (Fljót 723)
'I will give that counsel to you as to anyone else ...'

6) OIce Viltu nokkurt liðsinni okkur veita? (Hrafn 1404)
'Will you give us some help?'
7) OE ... þæt wé ne magon ealle ðás race éow be endebyrdnysse secgan, (ÆlfH 88)
'... so that we cannot relate to you all of this narrative in the right order,'

I hold that *Scrambling* in OE and OIce applies optionally to raise internal Arguments and Adjuncts into left-phrasally-adjoined targets, whereby the T-head serves as barrier to object movement. If *Scrambling* is internal adjunction, it is the syntactic status of this displacement operation that defines its optional character, viz. *Scrambling* is optional in narrow syntax, given that it is unconstrained by the feature-checking mechanism. Crucially, while it is prohibited by *Conservation of C-Command* (Wallenberg 2009: 132) from moving constituents across c-commanding functional heads, *Scrambling* is conditioned by a variety of factors, semantic/information-structural/prosodic. Remarkably, *Scrambling* in OE and OIce seems to be able to apply in both directions, viz. it either affects the information structurally neutral constituents or it moves some constituents into the Middle Field to mark them as information structurally prominent.

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The Development of the OV Order as a Grammatical Category in Chinese

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This study proposes constructions involving the OV order in Chinese have always formed a grammatical category, and the central function of the OV order is to impose focal prominence on the preverbal object. The OV order as a grammatical category has remained unchanged from Old Chinese (8c.-1c. B.C.), Middle Chinese (1c.-6c. A.D.), and Early Mandarin Chinese (7c.-19c. A.D.) to Modern Chinese. However, the subconstructions of the OV order have changed since Old Chinese. The framework of Construction Grammar (Goldberg 2006) is used in this analysis to account for how the central case of the OV category is instantiated in each of its conventionalized extensions, and why they have formed a grammatical category.

The distinction of the OV and VO orders is closely related to the debate of the basic word order of Chinese. The issues regarding word order in Old Chinese have been much debated. Li & Thompson (1974) and Xu (2006) among others hypothesize that Old Chinese was a SOV language and has changed to SVO, whereas Peyraube (1997) and Sun & Givón (1985) among others argue that SVO has been the basic word order throughout the attested documents of Chinese. This study takes the position that VO was the basic word order in Old Chinese, while OV was only employed to foreground the grammatical object in the information structure for various purposes. OV is found in a wide array of linguistic constructions in Old Chinese, including clauses involving *wh*-pronouns, negative context with a pronominal object, constructions involving the marker 是*shì*, and clauses containing the object marker 以 *yǐ*, as shown in (1)-(4) respectively. The shared purpose of these constructions was to make the object prominent in the information structure.

(1) 吾誰欺？欺天乎? [*Analects*]

Wú	**shéi**	qī？	Qī	tiān	hū？
I	who	deceive	deceive	Heaven	QUESTION PARTICLE

'Who do I deceive? Do I deceive Heaven?'

(2) 不吾知也 [*Analects*]

bù	**wú**	zhī	yě
NEG	I	understand	sentence final-PARTICLE

'(You) don't understand me.'

(3) 固敗是求 [*Zuo Chronicle*]

gù	**bài**	shì	qiú
naturally	defeat	preverbal marker	ask for

'Naturally, (one) asks for DEFEAT'.

(4) 故以羊易之 [*Mencius*]

gù	yǐ	**yáng**	yì	zhī
thus	YI	sheep	change	it

'Thus (I) exchanged it for a sheep'

For example, *wh*-elements are focused constituents. They occurred in OV in Old Chinese, as in (1). In Old Chinese, pronouns under negation tended to appear in the preverbal position, but there were also cases in the postverbal position. They contrast in that the preverbal ones receive focal prominence, as in (2). 是*shì* is treated as a preverbal marker (Peyraube 1997). The clause in (3) functions as a cleft construction to indicate the preverbal object is an identificational focus with exhaustivity (Kiss 1998). The marker 以 *yǐ* in (4) emphasizes how its following noun is disposed. The marker frequently appears in parallel clauses to contrast the following nouns. Although each of the four constructions has its own semantics, they all involve the OV order.

The set of constructions that exhibit the OV order naturally form a coherent functional category. Semantic or pragmatic generalizations can be found among them, such as contrast and emphasis. The OV order deviates from the prototypical sentences, which appear in the VO order and have a typical predicate-focus information structure. In addition, the prototypical sentences do not need additional markers, whereas many of the OV constructions require a marker. The subconstructions involving the OV order do not necessarily have the same set of attributes as that of the central case. However, the subsets of attributes from the central case can be instantiated in each of the conventionalized functions (Goldberg 2006). The above subconstructions found in Old Chinese ceased to be used around Middle Chinese, but the central case of the OV grammatical category has remained unchanged from Old Chinese to Modern Mandarin.

The OV order is found in different periods of Chinese with the function of indicating a variety of focuses carried in the object position. Different subconstructions involving the OV order developed at later stages of Chinese. Particularly, the particles such as 連 *lián* 'even', 都 *dōu* universal quantifier, 也 *yě* 'also', 只 *zhǐ* 'only', and 甚至*shèn zhì* 'even', emerged in Early Mandarin. They become obligatory markers in Modern Mandarin in order to make explicit different types of focuses of the preverbal object position, including contrastive, additive and restrictive focus (Zhang 2000). For example, *lián* 'even' clearly indicates the focus is an additive type, as shown in (5).

(5) 我連啤酒都/也不喝

wǒ	**lián**	píjiǔ	**dōu/yě**	bù	hē
I	even	beer	DOU/YE	NEG	drink

'I don't drink even BEER.'

This study shows that word order is not a purely syntactic phenomenon. Rather, it pairs form and meaning. Chinese OV order encodes its own semantics, which departs from that of the basic VO order. In sum, the characteristics of the grammatical category OV have remained unchanged throughout the documented history of Chinese. It is the subconstructions that have changed. The discontinuation of old subconstructions results in the recruitment of new ones due to the need of creating maximal distinction among related meanings of a polysemous form in the diachronic development of a language.

Key words: Word order, focus, object shift, Mandarin Chinese, Construction Grammar

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A Discourse Theory of the Grammaticalization in Chinese Quantified NPs

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This paper provides evidence that grammaticalization correlates with low discourse prominence (*e.g*. Boye & Harder, 2012), by describing and proposing an explanation of a semantic change process, witnessed in a (hitherto unstudied) Chinese quantified NP expression (henceforth *da*-NumP). A canonical numeral phrase has the form of [Num Classifier NP] (Li & Thompson, 1981). In comparison, the *da*-NumP has the form of [Num *da* N], where a morpheme *da* intervenes between the numeral and the noun. I am concerned with the diachronic meaning change of the *da*-NumP. I looked into data from the Peking University Center for Chinese Linguistics (CCL) Historical Chinese corpus and identified three types of systematic uses of the *da*-NumP. Examples (1-3) illustrate the three uses, based on the chronological order in which the first attested examples of each use arise. I also cross-checked CCL's contemporary Chinese corpus and the Chinese-language Google. My findings confirmed that the current (and very productive) uses fall within the patterns in (1-3).

(1) [Late Old Chinese, First attested ca. 6 AD]

a. (Context: Referring to the ten most severe punishable by death sins out of all the sins, according to a Buddhist classic)
Shi da zui
Ten DA sin
'(Roughly) The Ten Big Sins'

b. (Context: Referring to the four most prestigious Buddhist monks within a kingdom)
Si da chanshi
Four DA monk
'(Roughly) The Four Big Monks'

(2) [Middle Chinese, First attested ca.600 AD]

a. (Context: Referring to the three greatest Buddhist temples voted by the public, out of all the temples in Luoyang
Luoyang san da ming-si
Luoyang three DA elite-temple
'(Roughly) The Three Famous Temples'

b. (Context: Referring to the four most powerful divine kings out of all the kings in the world, who reside in the heaven)
Si da tian-wang
Four DA heaven-king
'(Roughly) The Four Heavenly Kings'

(3) [Modern Chinese. First attested ca. 19th century]

a. (Context: The speaker was introduced to four

new friends. Noticing they were all pretty
brawny, he called them the following).
Si da zhuang-han
Four DA muscular-guy
'(Roughly) The Four Muscular Guys'

b. (Context: The speaker has in mind certain entities that are not in the discourse, and utters the following to introduce them into the discourse, and mention its referents afterwards)
Jiaru ben-hui xuyao san da yao-su: Shouxian... Qici....
Join our-society need three DA key-condition: First.....Then...
'Three necessary conditions are needed to join our society: the first is...the second is....'

(1) has a scalar meaning (Grano & Kennedy, 2012): given the form [Num da N], N denotes a background set of entities that are ranked via a context-appropriate scale (*e.g*. the graveness scale of sins). *Da* picks out the top ||Num|| number of salient entities on the scale (*e.g*. four largest sins). (2) retains the scalar reading, as *da* still picks out the top three most outstanding temples out of a context set of temples, or the most outstanding kings out of all the kings. (3), however, is non-scalar, where the salient ||Num|| referents are the only relevant entities within contexts, without being evaluated against any sets.

I propose that these uses form a grammaticalization path, accompanied by the change in the relative level of discourse prominence within the expression. I assume that in all utterances, the parts conveying the prioritized message receive primary discourse prominence, and the parts conveying background messages are less prominent (Bundesen, 1990; Sperber & Wilson, 1995; Talmy, 2007; Langacker, 2008). In (1), the [Num da] part is primary, since they function to pick out the top-ranked entities. The N hosts the background set and receives secondary prominence. Hence,

(4) a) [Num da] is primary in discourse prominence;
b) N is secondary.

Furthermore, in (2), the N no longer expresses the background set, but exclusively characterizes the top-ranked entities, by assigning a discourse-new property to them (*e.g. ming-si* 'elite temple'). I propose that, at the stage of (2), the da-NumP encodes a dynamic process. The process starts with one information state, in which the salient top-ranked entities are picked out/introduced into the discourse structure. Afterwards, a new information state replaces the prior one and updates the discourse structure with new information on these entities (Lascarides & Asher, 1991; Asher & Lascarides, 1995). Accordingly, the discourse configuration is reshuffled:

(5) a) The update process (hosted by the N) becomes primary in prominence;
b) The ranking process becomes secondary;
c) The previously secondary context set becomes further demoted (since the update process doesn't access it and only operates on the salient entities).

This causes the background set to be ousted (Traugott 1988; Boye and Harder 2012) from surface realization, which I believe ultimately leads to the total loss of its semantic substance: because the background set is not overtly realized, and only the salient entities that are the *outcome* of the ranking process feeds into the characterizing process, the semantic content of the background set is lost. *Da*'s function is then reanalyzed as simply highlighting ||Num|| discourse-salient entities accessible from contexts. This new function enables the non-scalar uses in (3). *Da* marks any ||Num|| entities that are salient from discourse (as in 3a) or to be introduced into discourse (as in 3b), before a discourse-new property characterizes these entities.

Thus, this case study offers new insights into the functionalist explanations of semantic bleaching (Givon, 1979; Hopper, 1991; Hopper & Traugott, 2003), by providing a detailed account of how the grammar-discourse inter-dependence leads to structural and functional change of a morpheme. It also supports the view that the loss of a certain linguistic unit's semantic substance should not be understood in isolation, but rather in terms of the lowering of its prominence status relative to other syntagmatic materials.

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Old English Gone 'Belly-up': The Limits of Context in Semantic Shift?

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Hock & Joseph (1996/2009) put forward the strong claim that context plays a determining role in all semantic change, at least for lexical semantics.

In this paper, we challenge their claim on two fronts: on empirical grounds, based on a set of semantic changes in the history of English, and on conceptual grounds, interrogating what "context" means in this formulation. While we do not contest the role of context in semantic change, we argue

that in order to bring context into play, the notion of "context" necessarily expands so as to render the term unexplanatory.

On the empirical plane, we test H&J's view against several Old English (OE) words pertaining to abdominal organs, including innoþ, wamb, cwið(a), and hrif. While some OE internal-organ words are very specific (e.g., milt for 'spleen'), others show generalized meanings or even polysemy. For instance, innoþ refers to the bowels generally, or the place of fetal gestation specifically, whereas cwið(a) and hrif are largely unambiguous in their reference to the uterus. Hrif, however, belongs to a more vulgar register than innoþ or cwið(a), likely being reserved for an animal uterus. As for *wamb*, in medical recipes, it refers to the stomach, lower intestine, or outer abdominal surface, but not the uterus, so that it underwent semantic specialization away from a general Proto-Germanic meaning 'belly', seen in its Gothic cognate *wamba*. OE *wamb* shifts in Middle English (ME) to meaning place of fetal gestation, and OE *belg* (NE *belly*) 'bag, pouch, sack', used metaphorically, comes to occupy the general 'belly' sense.

It is worth considering the factors at work in these shifts. *I*nnoþ, while apparently the primary OE word for the place of fetal gestation, did not endure into ME with this meaning. Contributing to innoþ's failure to thrive was its lack of specificity, unproblematic in earlier non-invasive medicine, but unhelpful in the Italian medicine reaching England in the eleventh century. Innoþ was then relegated to colloquial usage, retaining only its broadest meaning of 'innards'. Thus, innoþ's semantic change is partially motivated by new views concerning anatomy. For *belg*, the gap left by *wamb*'s shift in meaning was seemingly decisive, while for *wamb*, genre, e.g., use in homilies and scripture, is a determining factor for its shift, and for *hrif*, register.

Turning to the conceptual dimension, we ask whether such factors – medical practices, changes in related items, genre, register – are included under H&J's umbrella term "context". More generally, what does "context" actually entail? Clearly, lived environment must play a role as an agent of semantic change (e.g., OE bead), as well as the collection of cognitive associations that form the bases for analogy, including folk etymologies. Thus "context" can be utilized in each case, but only at the expense of turning the notion into a laundry list of unrelated textual, social, and cognitive factors.

We submit that broadening "context" in this way undermines its utility; if "everything is context" then in a sense nothing is context, and the notion loses predictive power, becoming nearly useless.

Locatives and existentials: From Latin to early Italo-Romance

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The paper offers some historical remarks on the development of locative and existential structures from Latin to early Italo-Romance. In Latin, the prototypical locative structure manifests the unmarked SOV order of categorical sentences, exhibiting a non-focal referential argument in first position followed by a predicative locative prepositional phrase and the clause-final copula (1a). By contrast, the V2 syntax of early Italo-Romance allows the raised verb to be preceded by a pragmatically

salient element (Renzi 1985, 1988, Vincent 1988, Benincà 1994, 2004, 2006, Salvi 2000, 2004, Ledgeway 2012, Poletto 2014). In the case of locatives, this can be a topical subject (1b) or a focal prepositional phrase (1c).

Locatives

(1) a. Cicero meus in Formiano erat. (Latin)
Cicero.NOM my.NOM in Formiano be.PST.3SG
'My Cicero was in Formiano.'
(Cicero, *Ad familiares*, XVI, 12)

b. Messer Azzolino era nella sala. (Old Tusc.)
Sir Azzolino be.PST.3SG in.the hall
(*Novellino*, LXXXIV, p. 95)
'Sir Azzolino was in the hall.'

c. Dall' una parte fu il conte d' Universa. (Old Tusc.)
from.the one part be.PST.3SG the count of Universa
'The count of Universa was on one side.'
(*Novellino*, LX, p. 67)

Leaving aside word order, in the following examples of inverse locatives and existentials we focus on the emergence of a (locative) clitic in early Italo-Romance, which is absent in Latin.

Inverse locatives

(2) a. In eo flumine pons erat. (Latin)
in that river bridge.NOM be.PST.3SG
'On that river (there) was a bridge.'
(Caesar, *De bello gallico*, II, 5)

b. In questa insula de Colcosa sì era in quillo tiempo (Old Camp.)
in this island of Colcosa WOM be.PST.3SG in that time
una citate
a city
'In this island of Colcosa, there was indeed, at that time, a city.'
(*Libro*, II, c.6, p. 55)

c. Dentro a quillo palazzo [...] sì **nce** fo una sala. (Old Camp.)
inside at that palace WOM PF be.PST.3SG a hall
'Inside that palace… there was indeed a hall (there).'
(*Libro*, V, c.21, p. 80)

Existentials

(3) a. Erant in quadam civitate rex et regina. (Latin)
be.PST.3PL in one town king.NOM and queen.NOM
'There were in a town a king and a queen.'

(Apuleius, *Metamorphoses*, IV, 28)

b. Era in Sicilia unu admiragliu. (Old Sic.)
be.PST.3SG in Sicily an admiral
'There was an admiral in Sicily.'
(*Conquesta*, VIII, 10-11, p. 31)

c. Sì **ci** fu in Sichilia grandi fami. (Old Sic.)
WOM PF be.PST.3SG in Sicily great hunger
'Indeed, there was great hunger in Sicily.'
(*Conquesta*, XVIII, 3, p. 85)

In the early Italo-Romance examples, both the inverse locatives with a detached locative phrase and the existentials display an indefinite noun phrase. In these structures, the clitic appears to be optional (cf. 2b vs 2c, and 3b vs 3c). Interestingly, if the topical predicate of the inverse locative remains unexpressed, but is contextually or situationally recoverable in discourse, the clitic is obligatory with a definite noun phrase.

(4) Anco ce fu don Dionisi sio zio. (ORom.)
also PF be.PST.3SG sir Dionsi his uncle
'Also his uncle sir Dionisi was there (in that situation).'
(Cronica, XI, p. 53)

Context

Taliffa se perdeva in tutto, se non se succurreva. [...] Dicese che madonna santa Maria fussi nata in questa citate. [...] Lo primo aiutorio fu quello de papa Benedetto [...]. Lo secunno aiutorio fu [...]. Anco ce fu don Dionisi sio zio […]

'The town of Taliffa would be lost, if it had not been helped. [...] It is said that the holy Madonna Maria was born in this town. [...] The first support was that of the pope Benedict [...]. The second support was [...]. Also his uncle don Dionisi was there (in the besieged Taliffa) […]

The evidence above shows that the clitic starts to appear in unmistakably locative contexts, i.e. in inverse locative sentences with a focal argument and an understood topical locative predicate (4). Our data suggest that the emergence of the clitic is to be accounted for in the context of the overt marking of definiteness, which in turn correlates with the rise of functional structure in the transition from Latin to Romance (Benincà 1988, 2006, Salvi 2004, Ledgeway 2012). The generalization of the clitic to structures with indefinite noun phrases testifies to a change whereby the clitic is progressively reanalysed. Precisely, in entering these structures the clitic undergoes a process of layering (Hopper and Traugott 1993), which splits its role into two distinct functions. In inverse locatives, the clitic retains the its locative meaning, and resumes the locative phrase within the clause, taking a pro-predicative role (2c). In existentials, the proform loses its referential locative function, and becomes a pro-argument (3c).

Reconstructing the possessive inflection of Proto-Zamucoan

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The Zamucoan family consists of two living languages: Ayoreo (**AY**) and Chamacoco (**CH**), spoken in Northern Chaco (between Bolivia and Paraguay) by approximately 4500 and 2000 people, respectively. The Zamucoan family also includes the now extinct Old Zamuco (**OZ**), described in the early 18th century by the Jesuit Father Ignace Chomé (1958 [*ante* 1745]). The first stable contacts with the Ayoreos began around the half of the last century, whereas the Chamacocos were already in contact with the Western civilization at the turn of the XIX century, thus undergoing the linguistic influence of Spanish and Guaraní. The Zamucoan family is divided into two branches stemming from Proto-Zamuco (**PZ**): According to glottochronological computations (Holman *et al*. 2011; Müller *et al*. 2013), CH split long ago from OZ and AY, and indeed it only shares 30% of its lexical roots with AY (Bertinetto 2009). This notwithstanding, all three languages present morphosyntactic correspondences, allowing robust diachronic insights (Ciucci 2013; Ciucci & Bertinetto, to appear).

Like all Chaco languages, Zamucoan distinguishes *possessable* and *non-possessable* nouns (Fabre 2007). In most languages of the area, the former employ personal prefixes to agree with the possessor, while the latter cannot host possessive markers. The possessive inflection of the Zamucoan languages is reported in the Table below, based on data from Ciucci 2013. From a merely descriptive point of view, one can detect the Person Prefix, the Thematic Vowel and the Root, in this order. The segmentation in the table shows that the first two components are not always obligatory. In the third person there is a contrast between reflexive third person (RFL), expressing coreference with the subject, and non-reflexive third person (3-person) characterized by remarkable polymorphism. The paradigm also includes a generic-form (GF), indicating unspecified possessor.

	Old Zamuco	Ayoreo	Chamacoco
1S	*j-*/*ʧ-*/s-V-root	*j*-V-root	*p*-V-root
2S	Ø-*a*/V-root	*b*-a/V-root	Ø-*a*/*e*/V-root
3	Ø-V-root Ø-Ø-root *d-*/*g-*Ø-root	Ø-V-root Ø-Ø-root *d-*/*g-*/*k-*/*p-*/*j-*/V-root	Ø-V-root Ø-Ø-root *d-*/*k-*/*j-*/*w*-V-root
RFL	*d-a*/V-root	*d-a*/V-root	*d-a*/*e*/V-root
1P	*aj-*/*as*-V-root	*jok*-V-root	–
2P	*aj-*/*as*-V-root	*wak-a*/V-root	–
GF	*p-*/*d*-V-root Ø-Ø-root	*dVk-*/*g-*/*k-*/*p*-V-root Ø-Ø-root	*d-*/*dVk-*/*k*-V-root Ø-Ø-root o-[3-person]

The aim of this paper is to present a diachronic reconstruction of PZ possessive inflection. OZ is the most conservative language, while AY and CH present some innovations: (1) in CH the original 1S-inflection was replaced by the most frequent GF allomorph, while a new kind of GF, not to be

found in the other Zamucoan languages, emerged; (2) CH has lost the 1P- and 2P-inflections; (3) the AY 1P-inflection and 2S/P-inflections show prefixes stemming from free personal pronouns.

Although CH is the most innovative language, one can find some relics of the original 1S/P-inflections, which are of fundamental importance for reconstruction. In particular, the rare CH exceptions concerning the 1P-inflection show the same prefixes as OZ, never observed in AY despite the genetic proximity between AY and OZ. The paper will also point out that the reconstructed possessive inflections of PZ share remarkable similarity with the verb inflection (in particular with the irrealis mood).

Interestingly, some of these morphological exponents can be found in other surrounding languages (Ciucci 2014). This lends support to the hypothesis that the Gran Chaco constitutes a linguistic area over and above the genetic divergence between its main linguistic families (Comrie *et al*. 2010). Indeed, the Chaco populations, although traditionally in mutual conflict, have been in narrow contact for centuries, so that not only lexical, but even morphological borrowings had a chance to emerge.

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The rise of postposed adpositionals in the history of Dutch

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In Modern Dutch, if an adpositional occurs after a noun phrase, the entire phrase receives a directional reading and not the possible locational reading found with preposed adpositionals, as seen in (1) and (2).

1. *Hij loopt het gebouw in.*
   a. *'He is walking in(side) the building'
   b. 'He is walking into the building'
2. *Hij loopt in het gebouw.*
   a. 'He is walking in(side) the building'
   b. 'He is walking into the building'

Middle Dutch, however, has been observed not to have postpositions (Hogenhout-Mulder 1983; Van der Sijs 2005; Cloutier 2006); rather, locational and directional meanings were often distinguished through case, namely dative for locational and accusative for directional readings (Hogenhout-Mulder 1983; Van der Wal and Van Bree 1992; Cloutier 2006). The suggestion that postpositions arose as case distinctions were lost (Van der Horst 2011, Cloutier 2006), however, is undermined by a number of observations. First, many of the adpositionals that can be used in postposed directionals in Modern Dutch did not allow case alternation in Middle Dutch (Blom 2005, Van der Horst 2011). Second, the time span between the loss of case and the rise of postposed directionals appears too great. (Lin 2012). Second, in some archaic expressions, both Modern English and Modern Danish allow postpositionals, which bears some striking semantic similarities as the corresponding postpositionals in Dutch. Third, despite maintaining productive case systems, both Modern German and Modern Icelandic can optionally reinforce a directional or a locative reading of adpositional phrases through the use of adverbs. By taking into account pan-Germanic evidence and examining diachronic data in the history of Dutch collected from various corpora, I suggest that the postposed directionals in Dutch arise through a combination of factors: the phonological and semantic weakening of certain prepositions, in particular *te*, led to steadily more obligatory reinforcement of adpositional phrases through the use of locative adverbs; the phonetic conflation of locative adverbs and adpositions led to a blurring of the syntactic properties of the two formerly distinct categories; and the rigidification of the word order led to a preference for locative adverbs to appear after the adpositional phrase.

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VARD, DICER and Spelling Changes: The Development of Etymological ō in Early Modern English Texts

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The paper proposed will account for the results of a pilot systematic quantitative study of the spellings that are linked to the Great Vowel Shift (GVS), a major phonological change which occurred approximately between the early fifteenth century and the late eighteenth century (McMahon, 2006: 189; Watt, 2011: 141). The study will investigate spelling evidence for the development of vowels during Early Modern English (EModE). In particular, the study investigates spelling evidence for the development of during Early Modern English. Changes such as /o:/ > [u:] are said to have begun sporadically in the East Midlands in the early fourteenth century Lass (1999). Claims such as this are based on evidence from a limited number of sources. However, there is no quantitative study that ascertains the distribution of the spellings suggested for the EModE period. This proposed study seeks to address this, by undertaking such a quantitative type of research. Specifically, the investigation will address the following questions:

- When and where do the spelling variations appear first and how do they spread regionally and temporally?
- Do the patterns point out to any differences across different linguistic registers and corpora?

This type of analysis has only recently been made possible thanks to the development of two analytical tools – VARD 2 and DICER (Baron & Rayson, 2009; Baron et al., 2009). These software types allow for a quicker and more comprehensive identification of spelling patterns and will allow the researcher to undertake the first systematic quantitative study on EModE spelling variation. The data analysed through VARD and DICER will be derived from sources dating between c. 1500 and c. 1700 (approximately corresponding to the beginning and the end of EModE). The focus on this period of time ensures that there is a continuation from previous studies focused on Middle English (in particular, Stenbrenden, 2010) and that the spelling variation patterns will be tracked for the period

immediately before and during the social, cultural and linguistic activities which influenced spelling standardisation and change. These include the invention of printing at the end of the 15th century, the influence of the Civil War in 1642-9 and the input of spelling reformers (Lass, 1999).

This study feeds into the larger debate on the GVS which has drawn the attention of a large number of scholars for decades. The proposed research will be a pioneering work which will contribute to offering answers to some of the most burning questions on the GVS and will give insights into the development of EModE pronunciation. The fact that an innovative methodology owed to the invention of IT tools is employed in this study may also make this piece of research an example to consider for future scholars who wish to undertake systematic quantitative studies of spelling.

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Distance from subject as a factor in verbal deflection

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It is hypothesized that the *distance* between a finite verb with person and number agreement features, and its sentential subject, is a factor in the deflection of the verb owing to the heavier load on the short-term memory of the speaker or writer. This should ideally be tested on a corpus of spoken language, but will in this case be investigated in a corpus of 17th century letters captured from Dutch ships in the course of Anglo-Dutch warfare. The private letters in this corpus, compiled by researchers from the University of Leiden in collaboration with the Institute for Dutch Lexicology and known as "Letters as Loot" (see www.brievenalsbuit.nl), are particularly suited to approximate the Dutch vernacular of the time.

Although private letters, particularly if written by members of the lower classes, may be considered the closest approximation to the spoken word, provision has to be made (i) for the effect of the greater amount of time a writer has to reflect on speech production, and (ii) for letters produced for less literate people by routine letter writers and perhaps subject to scribal conventions (see Rutten & Van der Wal 2011). The first is difficult to control, but though writers have a greater opportunity for inserting hypercorrective and other embellishments than speakers, they also have a bigger chance to correct what are perceived to be "errors". The problem described in (ii) may be avoided by restricting the letters selected for analysis to autographs, or letters known to have been written by the sender him- or herself.

"Faulty" agreement, in general, may be defined as a departure from the verbal paradigm known to be generally current at the time, cf. (1). However, it is even more important to consider the *type* of departure from the norm. Thus, final *-t* and *-e(n)* deletion contribute directly to the deflection of the Dutch verb, cf. (2); *ick .... doen* (instead of *doe*) – though a well-known dialectal variant – is nevertheless a step in the direction of bringing the verbs *doen, gaan, staan, slaan* and *zien* in line with the regular Dutch pattern; writing an infinitive – the unmarked form of the Dutch verb – instead of a finite form at the end of a subordinate clause, may be an indication of the role of short term memory in verbal deflection, cf. (3). Individual attention will therefore be given to the various types of departure from the norm.

1) *eer dat jck u.l. brief ontvangen* ***heeft*** **[**for ***heb(be)***]
   'before I (have) received your letter'
2) *tot wij Een goede prijs* ***krijg*** [for ***krijge(n)***]
   'until we get a good price'
3) *dat daer een groote slagh... weesen* ***sullen*** [for ***sal***]
   'that there will be a great battle'

"Distance" may be accounted for (a) by distinguishing between SVX and SXV clauses, on the assumption that the verb is usually adjacent to the subject in the first case and often positioned towards the end of the clause in the second, and/or (b) by counting the number of intervening words. Example (4) below demonstrates the proximity of subject and verb in an SVX clause and (5) their remoteness from each other in an SXV clause, while (6) illustrates the possibility of the verb being part of an SVX clause but nevertheless separated from its subject through conjunction and ellipsis. (Note that the agreement is faulty in all three instances.)

4) *het lijk* ***wierden*** [for ***wierd***] *van ontallicke menschen gevolght*
   'the corpse was followed by a large crowd of people'
5) *dat de fransen hier uijt onse lande weder* ***veertreck*** **[**for ***vertrecke(n)***]
   'that the French departed from our country'
6) *wij leggen hier aen sinte crostoffel omte laden maer* ***sal*** [for ***sulle(n)***] *naer gissinghe...*
   'we are docked here at St Christopher in order to load but will supposedly...'

The outcome will be compared to similar texts in Cape Dutch from the same period which, though restricted in number, represent the onset of the full deflection of the verb.

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The Germanic Foot and the Old English verse line

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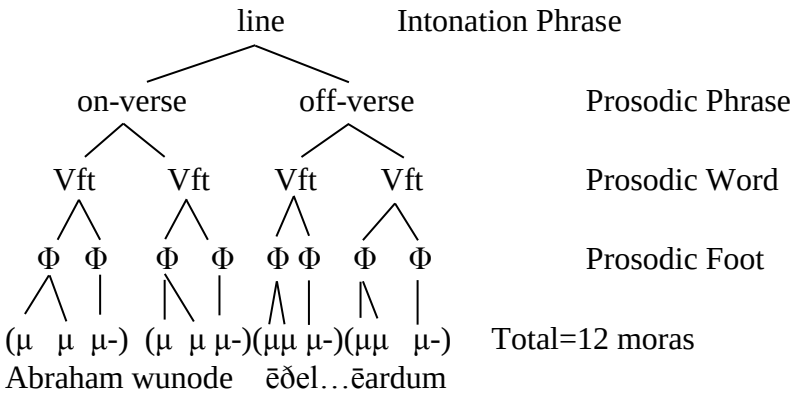
This talk presents an analysis of the verse design of Old English verse. The analysis is designed to make metrical studies of OE verse compatible with current practice in OE syntactic analysis. A solution combining the traditional binary branching structure with the Germanic foot hypothesis is proposed to account for the huge variety in extant line types.

A selected corpus of over 5000 lines from a variety of OE verse texts was analysed for syllabic structure, vowel quantity, stress distribution and alliteration. Simple descriptive statistics were used to identify typical features and their distribution.

Golston & Riad's (2003) generalisation that OE lines contain between 8 and 16 vocalic moras was confirmed for the experimental corpus. In this analysis, each vowel is weighted for 1 or 2 moras, codas are not counted. Statistical analysis showed the moraic length of standard lines is normally distributed around 12. The distribution of syllables in these lines shows no similar tendency. To explain this, the asymmetric Germanic foot proposed by Dresher & Lahiri (1991) was adapted to account for typical verse foot (Vft) structure. It is shown that the text is organised to fit four verse feet, which are composed of two metrical positions (Φ), the left position is by default two moras (μμ), but can be reduced to one, and the right position is by default one mora (μ-), but can be increased to two, depending on lexical input. Each verse foot has therefore a minimum of two syllables and a maximum of four, but no typical syllabic value independent of its moraic value.

A prototypical line is shown in Fig. 1.



"Abraham dwelt in his native land" *Genesis* l.1945

Figure 1. A metrical tree-diagram of prototypical prosodic structure in OE verse, with corresponding prosodic hierarchy terminology and mora count.

Minimal (example 2) and maximal (3) lines are each produced by four violations of the constraints which produce the 3-mora feet, making them equally infrequent, as the statistical data suggests they are. The inflexibility of minimal and maximal lines causes syntactic boundaries to mismatch with foot boundaries. This suggests that the caesura should be considered a syntactic rather than a metrical boundary, as in (3).

2. (μ- μ-) (μ- μ-) (μ- μ-)(μ- μ-)
nergend usser com nihtes self "…our saviour; he came that very night…"
Genesis l.2634

3. (μμ μμ)(μ μμ μ) (μ μμ μ) (μμ μμ)
ðǣr hīe æt swǣsendum sǣton bū tū, "…where they at mealtimes sat together…"
Genesis l.2780

The Vft can be identified by a stressed syllable, usually but not necessarily on the left (*pace* Getty (2002)). Prototypical stress/unstress patterns (as in Sievers 1893) are shown to be emergent structures, determined by a combination of left-headedness and asymmetric binary branching at each level of the structure. These interact with the phonology of the chosen lexical items and syntactic structures, providing the variety of verse types categorised by Bliss (1962). This framework provides a quantitative, one-size-fits-all metre for all standard lines of OE verse.

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Illusions of transitive expletives in Middle English

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A major advance of generative syntax (Chomsky 2013: 38) has been to move away from stipulating construction-specific properties toward more modular accounts—first using parameters, and later locating parametric variation in the (functional) lexicon. In this paper, we look diachronically at English 'presentational' *there*, arguing that changes in its distribution from Middle English and Early Modern English to Present-Day English favour a predicate-associate analysis (e.g., Moro 1997) over a 'pure' expletive approach (e.g., Chomsky 1981 et seq.).

We examine *there*-clauses in the Penn Parsed Corpora of Historical English since Middle English, focussing particularly on transitive and unergative non-copular clauses. Strikingly, these transitive expletive constructions, as in (1), always contain both a modal and a negative associate, and disappear completely around 1530. Contra the account of, e.g., Tanaka (2000), this is very different from the situation of transitive expletive constructions in modern Germanic languages, where expletive subjects are less restricted in their distribution than they are in English.

(1) a. *for and I shuld not leve my selff a spone there* ***shall no poore neghebore of myne*** *berre no losse by eny chaunce hapned in my howse.* (1529: MORELET1-E1-H,423.15)

b. *He ordeyned þere* ***schul no man*** *say masse before þat he had seid þe ters, þat is to sey, `Legem pone'.* (a. 1464: CMCAPCHR,52.616)

We claim that the restriction of expletive *there* in Middle English transitive clauses to modal negative contexts arises from the syntax of modals prior to the early 16th century. Specifically, the transition of modals from verbal to inflectional heads included the reduction of their complement from a full nonfinite clause to a bare VP, as in (2), in the spirit of Wurmbrand's (2001) account of restructuring predicates. In such structures, the the embedded predicate has no external argument position of its own—any external argument is merged in the matrix clause, occupying the position that might otherwise host expletive *there*.

The availability of (only) negative associates in English transitive expletive constructions is a residue of the earlier, larger complements of modals. We propose that a negative associate requires a NegP below the modal, whose position in the functional hierarchy implies the possibility of a lower VoiceP. This additional structure accommodates an embedded external argument, as in (3), but is available only when there is overt evidence for NegP below the modal.

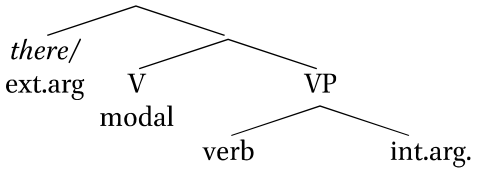
The reanalysis of modals as Infl elements in the early 16th century (Cowper & Hall to appear) closes the loophole that permitted external arguments to be projected below *there*, eliminating transitive expletive constructions from later stages of English.

At all stages of English, *there* appears only with predicates without a thematic external argument (unaccusatives, passives, copular constructions). The special property of Middle English was that modals, on their path to reanalysis as functional elements, had exactly this argument structure and thus permitted *there* subjects.

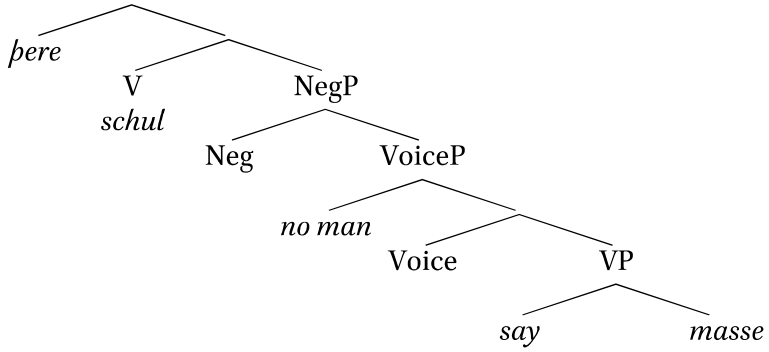
In Modern English, by contrast, the use of *there* with non-copular verbs has declined substantially: transitive and unergative verbs require passive or progressive morphology in order to co-occur with *there*. In Middle English, 28% of the *there*-clauses in the Penn Parsed Corpora contained no instance of *be*, either copular or auxiliary, while in Early Modern English *there* occurs without *be* only 6% of the time, and in Modern British English just 3%—always with unaccusative verbs like *arrive*.

Our analysis of *there* across these stages of English is analogous to Deal's (2009) proposal that *there* is sensitive to properties of its sister. However, in contrast to her proposal that *there* is in a selectional relation with the verb *be*, we argue that *there* is sensitive to the *semantic type* of its sister, in whose specifier it merges. The result is that *there* can merge only in certain positions, which happen to be a subset of the contexts where auxiliary or copular *be* occur. We further follow Moro (1997) (see also Freeze 1992) in suggesting that Present-Day English *there* is in some sense anaphoric to the main predicate. This provides a more principled explanation of the restricted set of contexts in which *there* appears than do currently prevalent views of *there* as a pure expletive.

(2)



(3)



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Diachrony and explanations for typological universals, with particular regard to the animacy/referential hierarchy

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While it is often assumed that typology can contribute to historical reconstruction (see, for example, Shields 2011), the reverse does not usually hold. Typological universals and explanations thereof usually refer to synchronic distributional patterns for particular grammatical phenomena, not the actual diachronic processes that give rise to these patterns from one language to another. Over the past decades, several typologists (Bybee 1988, 2006, and 2008, Aristar 1991) have raised the point that explanations of typological universals should be based on these processes, rather than the synchronic distributional patterns in themselves. In spite of a substantive body of relevant data collected within grammaticalization studies and cross-linguistically oriented studies of language change in general, however, this line of research has not been pursued systematically, neither in typology nor in historical linguistics.

Yet, the diachronic processes that give rise to the patterns captured by individual typological universals often pose several challenges for explanations of these universals posited on synchronic grounds. This is illustrated in the paper with regard to what is perhaps the best known typological hierarchy, the animacy/referential hierarchy

1st person pronouns > 2nd person pronouns > 3rd person pronouns > kin > human > animate > inanimate

This hierarchy describes the distribution of several grammatical phenomena across different NP types. The paper discusses extensive cross-linguistic evidence about the diachronic origins of three such phenomena, ergative vs. nominative alignment in case marking, hierarchical alignment, and the presence of singular vs. plural distinctions. The distribution of these phenomena across the various NP types on the hierarchy is traditionally accounted for in terms of synchronically identifed factors such as animacy, topicality, definiteness and natural attention flow (Dixon 1979 and 1994, Comrie 1989, DeLancey 1981, Corbett 2000, Song 2001, Croft 2003, among others). The available diachronic evidence, however, does not support these explanations, and poses a number of challenges for the very idea that explanations of typological universals can be based on synchronic, rather than diachronic data. In particular:

(i) Ergative vs. nominative case marking, hierarchical alignment, and singular vs. plural marking arise through processes of context-induced reinterpretation of pre-existing constructions (for example, the reinterpretation of various types of source elements as case or plural markers, and the reinterpretation of cislocatives and third person markers as inverse markers). These processes are based on highly specific contextual relationships between the meaning of the source construction and that of the resulting construction, rather than more general factors such as animacy, topicality, definiteness, or natural attention flow.

(ii) The distribution of individual phenomena (for example, ergative vs. nominative case marking, particular number markers, or inverse markers) across different NP types on the hierarchy also does not appear to originate from these factors, but rather reflects the distribution of the source construction. In particular, when some phenomenon is restricted to specific portions of the referential hierarchy, it originates from constructions restricted in a similar way. When the distribution of the source constructions is unconstrained, so is the distribution of the resulting phenomena. As different distributional patterns originate from different source constructions, and through different mechanisms, they cannot be related to a single overarching principle, as traditionally assumed in synchronically based explanations of the hierarchy.

(iii) Contrary to what is traditionally assumed on synchronic grounds, specific patterns describedby the hierarchy do not always originate in the same way. For example, hierarchical alignment is

a result of diffeent processes in different languages, and so are patterns where singular and plural markers are restricted to human or animate nouns.
These facts suggest that typological universals emerge from several particularized diachronic processes, not amenable to a unified explanation. A thorough understanding of individual universals requires qualitative and quantitative data about these processes,rather than data about the resulting patterns in themselves.

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On the diachrony of "anomalous" adverbs in some Indo-European languages

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The category of adverb in the oldest Indo-European languages has been dealt with in detail in recent contributions but they still need a more refined treatment, as the bibliography on adverbs has grown considerably in recent years, both from theoretical and typological viewpoint (Ramat / Ricca 1998; Cuzzolin / Putzu / Ramat 2006). The "anomalous" adverbial formations at issue are:

(1) the predicative adjective occurring with adverbial function, documented in numerous Indo-European languages, especially the oldest ones: Vedic, Avestic, Greek, Latin;

2) the construction Article + Adjective, which has occurred in Insular Celtic since the earliest texts, and is represented by the type of Old Irish in dílmainin ‘permittedly, freely’.

For this reason some preliminary remarks seem necessary, concerning the category of adverb in general and the “anomalous” adverbial formations I already alluded to in the title of this paper. Since no special word-formation rule for adverbs can be envisaged for the proto-language, as will be clear below, the adjective “anomalous” has to be interpreted as synonymous with “infrequent and marked”, even if, at least in certain languages like Ancient Greek and Latin, "anomalous" adverbial formations can occur frequently.

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Syntagmatically conditions allomorphy and the evolution of the present subjunctive inflection in some Ibero-Romance varieties: the exception which proves the rule?

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This contribution deals with the origin and evolution of a peculiar pattern of desinential allomorphy observed in the present subjunctive of some Ibero-Romance dialects, as exemplified by the Aragonese variety of the Valley of Bielsa (Badia Margarit 1950):

Table 1 – Present subjunctive, Aragonese (Valley of Bielsa)

	First Conjugation	**Second Conjugation**		**Third Conjugation**	
	SACÁR ‘take out’	METÉR ‘put’	VALÉR ‘be worth’	PARTÍR ‘leave’	FUYÍR ‘flee’
1sg.	sáqu-**e**	mét-**a**	válg-**a**	párt-**a**	fúig-**a**
2sg.	sáqu-**e**-s	mét-**a**-s	válg-**a**-s	párt-**a**-s	fúig-**a**-s
3sg.	sáqu-**e**	mét-**a**	válg-**a**	párt-**a**	fúig-**a**
1pl.	saqu-**é**-mos	met-**já**-mos	valg-**á**-mos	part-**já**-mos	fuig-**á**-mos
2pl.	saqu-**é**-z	met-**já**-z	valg-**á**-z	part-**já**-z	fuig-**á**-z
3pl.	sáqu-**e**-n	mét-**a**-n	válg-**a**-n	párt-**a**-n	fúig-**a**-n

The cells of the singular and third plural display an allomorphy pattern based on inflectional classes, such that first conjugation verbs take inflectional –e-, while verbs of the other classes (‘non-first’) take –a-. This is a purely morphological opposition which can be traced back to Classical Latin (in Maiden’s (2011a) terms, it is an instance of ‘morphological persistence’):

Table 2 – Present subjunctive, classical Latin

	First Conj.	**Second Conj.**	**Third Conj.**	**Fourth Conj.**

	AMĀRE ‘love’	TIMĒRE ‘fear’	RECIPĔRE ‘recover’	MITTĔRE ‘release’	PARTĪRE ‘share’
1sg.	am-**e**-m	time-**a**-m	recipi-**a**-m	mitt-**a**-m	parti-**a**-m
2sg.	am-**ē**-s	time-**ā**-s	recipi-**ā**-s	mitt-**ā**-s	parti-**ā**-s
3sg.	etc.				

The first and second persons plural of Table 1 depart slightly from this pattern in that they display an exacerbation of allomorphy for non-first conjugation verbs, such that some verbs take –a- (e.g. *fuig**á**mos* ‘that we flee’), but others take –ja- instead (e.g. *part**já**mos* ‘that we leave’).

Formally speaking, the origin of the ‘extra-allomorph’ –ja- is not difficult to identify. As Table 2 shows, some non-first conjugation verbs in Latin displayed a stem-final vowel (‘theme vowel’), -e- or –i-, depending on the inflectional class of the verb; over the course of time, due to regular sound change, both of the relevant vowels were reduced to the palatal glide, which must have been resegmented as the onset of the following syllable, and reanalyzed as an affix-initial unit:

Table 3 – Present subjunctive, late Latin

	First Conj.	Second Conj.	Third Conj.		Fourth Conj.
1sg.	am-**e**-m	tim-**ja**-m	recip-**ja**-m	mitt-**a**-m	part-**ja**-m
2sg.	am-**ē**-s	tim-**jā**-s	recip-**jā**-s	mitt-**ā**-s	part-**jā**-s
3sg.	etc.				

The alternation between –ja- and –a- that we observe in Table 1 is not simply a matter of morphological persistence, however. While in the system of Table 3 (usually located in late Latin) the distribution of the two allomorphs is synchronically ‘meaningless’, i.e. a matter of lexical idiosyncrasy, in the Ibero-Romance varieties at issue it follows a precise pattern, depending on the ‘paradigmatic value’ of the preceding stem: actually, -ja- appears if the preceding stem is the default stem (i.e. the same stem as in the infinitive), -a- if it is an allomorph of the stem, in an instance of ‘syntagmatically conditioned allomorphy’ quite unusual for the Romance verbs. The paper aims to explain the mechanisms and the causes of this peculiar ‘morphological innovation’, illustrating how the two allomorphs –ja- and –a- could be associated with different stem alternants, as well as how, and why, in the transition from the late Latin system of Table 3 to the Ibero-Romance system of Table 1, the alternation between –a- and –ja- could be ‘confined’ to two of the six present subjunctive cells, notably the first and second plural (this paradigmatic redistribution is at first sight surprising, considering that these are not the only two cells in which, depending on the verb, there may be an allomorph of the stem instead of the default stem).

The mechanism behind the evolution of this peculiar inflectional pattern, as we shall see, is extremely common, involving a series of regular sound changes followed by reanalysis processes on the part of speakers, and successive analogical adjustments. Also, we shall see that the observed innovations stem from an “inherent human desire for order” (Aronoff 1994) such that, faced with unexpected instances of allomorphy, speakers would spontaneously look for recurrent patterns (Anttila 1977, 2003), and would tend to interpret as “regular variation” what may in fact be nothing but the product of sound change (Andersen 1989), replicating the observed patterns outside of their original domain, in an attempt to make allomorphy maximally predictable (Maiden 1998). All this is far from exceptional. What is peculiar about the evolution of the inflectional pattern at issue, however, is the fact that the ‘recurrent patterns’ identified by speakers manifest themselves not on the paradigmatic dimension, but rather on the syntagmatic one. Thus, while the usual scenario is such that the appearance of, say, a given stem alternant in a paradigm cell implies the appearance of the same stem in other cells – cf. some recent studies on the evolution of stem allomorphy patterns in Romance verbs

(Maiden 2005, 2009, 2011b), what we observe here is rather that a given stem alternant can be interpreted as an index of the affixal allomorph co-occurring with it in the same inflected form (cf. Carstairs-McCarthy 2001, Carstairs-McCarthy and Cameron-Faulkner 2000).

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The OV/VO alternation in the history of Latin: new corpus evidence

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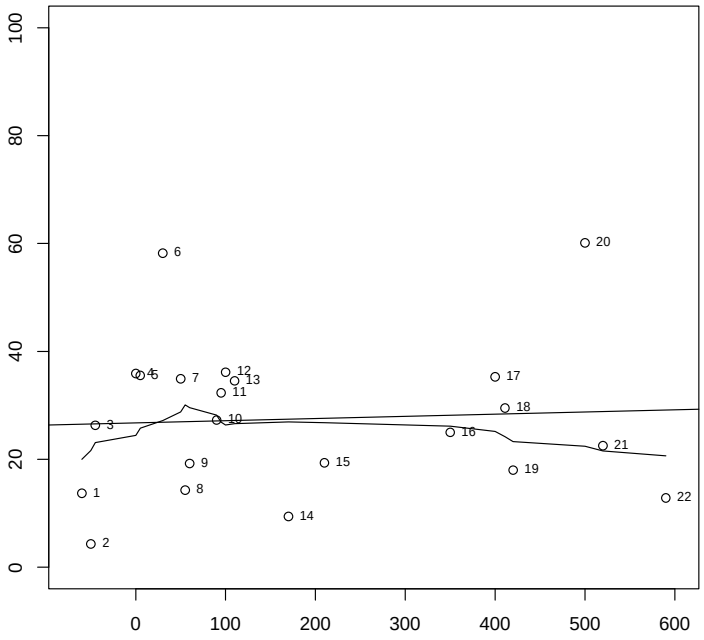
1. Introduction The aim of this talk is to offer a new perspective on the oft-discussed alternation between the word order patterns OV (1) and VO (2) in the history of Latin.

(1) potest aliquis sine ui **possessionem nancisci** **OV**
be.able.PR.3.SG someone.NOM without violence.ABL possession.ACC obtain.PR.INF
'It is possible for someone to acquire possession without the use of violence.'
(= Gai. Inst. 2.51)

(2) ita poterunt scripti heredes **retinere** **hereditatem** **VO**
so be.able.FUT.3.PL written.NOM heirs.NOM retain.PR.INF heritage.ACC
'Thus the appointed heirs will be able to retain the heritage.' (= Gai. Inst. 2.119)

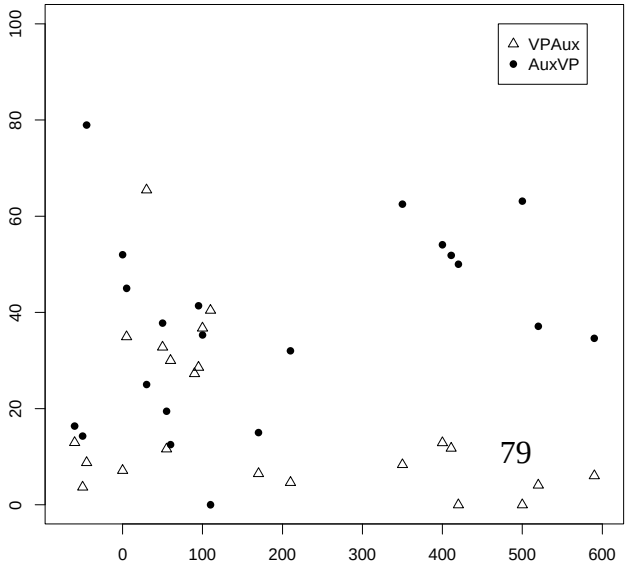
I will show that once a sufficiently large text corpus is taken into account, it emerges that the the OV/VO alternation remains remarkably stable during an extended period of almost 700 years (from Cicero (first half of the 1st c. BC) until Gregory of Tours (ca. 600 AD)). However, it will also be demonstrated that this generalization does not hold across all syntactic contexts. More particularly, the availability of the order VO can be shown to be to a large extent dependent on the headedness of the Tense node. This differentiated behaviour will be explained in terms of a major difference in clause structure between Classical and Late Latin.



Graph 1: Frequency of VO (in %) from ca. 100 BC - 600 AD. Case labels: 1=Cic., 2=Caes., 3=Var., 4=Vitr., 5=Liv., 6=Cels., 7=Sen., 8=Col., 9=Petr., 10=Front., 11=Quint., 12=Pliny, 13=Tac., 14=Gai., 15=Tert., 16=Pall., 17=Aug., 18=*Gesta Conlat. Carth.*, 19=Veg., 20=Pomp. M., 21=Caes. Ar., 22=Greg. T.

2. The persistence of OV in Late Latin All data presented below are based on a corpus study of 22 Latin prose texts (drawn from the LASLA or Brepolis database). As shown in Graph 1, it appears that no major increase of the order VO can be observed over the entire period under investigation, contrary to what is standardly claimed in the literature (see e.g. Bauer 1995 and the references cited in Ledgeway 2012). Instead, despite there being a good deal of synchronic variation, the average frequency of VO remains constant at about 20-30%, as shown by both the straight and the smoothed regression lines in Graph 1.

3. Refining the picture However, the picture just sketched changes quite strongly once a distinction is made between clauses with a head-initial and a head-final TP.



Graph 2: OV-VO in VPAux and AuxVP-clauses (60 BC - 590 AD).

Graph 2 shows the diachronic development of the order VO in VPAux and AuxVP-clauses with a modal auxiliary (*possum* 'be able' and *debeo* 'have to'). All direct objects which are unambiguously non-VP-internal (extraposed objects in 'V-Aux-O'-clauses; scrambled objects in 'O-Aux-V'-clauses) were excluded, as arguably these do not inform us about the OV/VO alternation proper. Clauses with a head-final TP (featuring the order VPAux) initially show a rather marked increase of the order VO (from ca. 60 BC until 110 AD), but after this, VO is consistently highly dispreferred, despite the order VPAux still being fully productive (see Danckaert to appear). In AuxVP-clauses on the other hand we initially see a stage with a lot of variation, but in Late Latin, a rather clear preference for the order VO emerges, and in any event, there is a very marked contrast with VPAux-clauses. In this particular environment it seems to be the case that there is in fact an increase of the order VO (but note that objects in AuxVO-clauses are in principle ambiguous between being VP-internal and being extraposed).

4. Explaining the discrepancy In order to explain the Late Latin interaction between the headedness of VP and TP illustrated in Graph 2 (and the absence thereof in earlier stages of the language), I will propose that Classical and Late Latin had a fundamentally different clause structure. First, in order to accommodate the availability of the cross-linguistically rare word order pattern VOAux (cf. Biberauer, Holmberg & Roberts 2014), I will propose that Classical Latin VPAux-clauses are derived by means of non-local displacement of the VP to a functional projection high in the functional field. This derivation is compatible with full word order freedom inside the VP. In addition, I will propose that the new grammar (which is dominant in the Late Latin period) derives the same surface order VPAux by means of (local) roll-up movement. This derivation does not allow for head-initial projections to be dominated by head-final ones (Biberauer, Holmberg & Roberts 2014), which explains the quasi-absence of VO in Late Latin VPAux-clauses. The transition between the two grammars will be argued to involve syntactic reanalysis (Danckaert to appear). On the other hand, in AuxVP-clauses the head-initial character of the T-node never has any consequences for the internal structure of the verb phrase. Rather, this environment provides a privileged context where the development towards a generalized VO-grammar (cf. present day Romance) can be witnessed. In any event, it is clear that by the Late Latin period, even in AuxVP-clauses, OV was still produced at fairly high rates, a finding which is in line with recent work on remnants of the OV order in Old Romance (cf. Poletto 2014 on Old Italian and Kroch & Santorini 2014 on Old French).

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Modality, subjecthood and semantic change: A case study on modal verbs in Ancient Greek

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In Ancient Greek, there are a number of predicates (verbs, and adjectives or adverbs combined with forms of the verb *be*), which express modality; these predicates generally lack person and occur in periphrastic expressions with infinitives. Even though in the literature, there are several studies on the grammatical expression of modality by means of grammatical devices like tense, aspect, and modal particles (Goodwin 1966, Horrocks 1995, Willmott 2007, among others), modal predicates have not been properly investigated so far; they are usually grouped together with impersonal verbs, and analysed as such.

The present paper examines the Ancient Greek predicates of necessity and possibility, taking into account both the syntactic frame in which they occur and the relation between the pre-modal (or literal) and the modal meaning. As a result of the syntactic and semantic analysis, it will be shown that the shift from the pre-modal meaning to the modal meaning does not depend on a diachronic development, but is rather a matter of construction. Specifically, non-modal meanings are associated with a personal construction, as exemplified in (1a), while modality is associated with an oblique subject construction, as exemplified in (1b):

(1) a. tís ára me pótmos aûthis hôd'/ epamménei sé
which-nom therefore me-acc destiny-nom moreover thus wait.for-3sg.pres. 2sg.acc
'Therefore, which destiny in turn awaits me and you' (Soph. OC 1718)

b. sphin kakôn húpsist' epamménei patheîn
3pl.dat bad-pl.gen highest-pl.acc wait.for-3sg.pres. suffer-aor.inf
'They have to suffer the worst of the disasters' (Aesch. Pers. 807)

A semantic map of modality in Ancient Greek (based on the model proposed by Van der Auwera & Plungian, 1998) will be drawn, and a proposal on how to explain and to model the semantic change will be presented. Indeed the proposal will be advanced with the aid of the theoretical framework of Cognitive Construction Grammar (Goldberg 1995, Barðdal 2004), which envisages language as a structured network of constructions, namely form–meaning pairings. This approach opens up the possibility of assuming a constructional meaning associated with the oblique subject construction in itself, and of determining which kind of taxonomic relation holds between the modal construction under investigation and the larger oblique subject construction.

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The augment in epic Greek

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Greek past tense forms of the indicative (imperfect, aorist and pluperfect) are marked by the addition of a prefix *e-* to the verbal form. While being the marker of past tense in Classical Greek, the prefix appeared facultative in earlier Greek poetry, and this absence was often explained as a poetic licence and a metrical tool. We argue that the use in the oldest Greek literature (epic Greek, i.c. Homer, Hesiod and the Homeric Hymns) was not random but explainable by morphometric, syntactic and semantic reasons. Later, these rules were no longer understood and the prefix became grammaticalised as marker of past tense and became mandatory in prose, while its absence in Homer and Hesiod was reinterpreted as a poetic licence and was imitated by later (epic, iambic and elegiac) poets.

Our investigation focused on the epic Greek, i.e. texts where the augment had not yet been grammaticalised, analysed the augment use from a morphometric, syntactic and semantic point of view, and found that the augment was used in

a) verbal forms that would otherwise be short monosyllables (Wackernagel 1906; Strunk 1987);
b) compounds;
c) similes and gnomic aorists;
d) speech introductions with an addressee;
e) in speech conclusions of speeches influencing large groups;
f) actions in the immediate past, and more particularly when the verb is combined with *nûn* "now", *autíka* "immediately" and *aîpsa* "suddenly".

It is left out in (mostly simplex) verb forms

a) in the dual or pluperfect (see the lists in Bottin 1969);
b) of four or more syllables;
c) referring to repeated actions in the past, more in particularly when combined with *aieí* "always";
d) with the *sk* suffix, referring to repeated actions or one action repeated by many (Pagniello 2007);
e) describing a remote past, mythical stories or timeless activities;
f) describing background actions, especially in sentences with *epeí* "after" (Bakker 2005:125-126);
g) followed by the particles *dé, gár, mén, te* and *ára*;
h) appearing in a series of past tense forms and preceded by an augmented verb form;
i) in negative sentences;
j) in the beginning of a verse or sentence;
k) in speech introductions without addressee, or in a soliloquy (De Decker 2015a, 2015b).

We discuss the examples and also address the exceptions, provide facts and figures on the observations made above, and explain them by assuming that

1. the augment was used, when the verbal form emphasised new information, had a link with the present situation and/or the speaker, referred to a past action that was still valid for the present, described an action in the immediate past or indicated a contrast between audience and speaker (Platt 1891; Drewitt 1912a, b and 1913; Bakker 2005; Mumm 2004; García Ramón 2012). It is best described as *a deictic marker that marked the completion of the action in the presence of the speaker* (Platt 1891:227; Bakker 2005:147). As such it was used in general truths, speeches and proverbs, because they had a link with the present/speaker and was absent in negative sentences and remote and mythical stories, because they were not linked to the current situation.
2. The augment could not be used when the verb form was followed by a 2nd position clitic (Drewitt 1912b:104). By Wackernagel's Law, a clitic must be put in the 2nd position of the sentence before the enclitic verb (Wackernagel 1892). As the augmented verb form is a compound of an accentuated deictic particle and an enclitic verb form (Wackernagel 1877), a sequence would mean that the particle had to be inserted between augment and verb form, but this is impossible in Greek, because the augment and verb cannot be dissolved and because the enclitic verb form always comes last in the clitic chain (Monro 1891:335-338; Wackernagel 1892:336; Delbrück 1900:51-53; Brugmann 1904:682-683; Krisch 1990:73-74; Ruijgh 1990; Wills 1993; Watkins 1998:70).
3. The augment is also omitted, when the augmented verb form is preceded by another augmented verb form: in a series of marked forms, often only the first element was marked while the others remained unmarked (Kiparsky 1968). As the augmented verb form is a marked form, only the first verb form is augmented in a sequence of past verb forms.

In later Greek, the augment became mandatory, but this evolution was not abrupt: the augment was rarely omitted in elegiac and lyric Ionic poetry (Smyth 1894:461-463), Herodotos did not augment the so-called *sk* iteratives and even in Classical Greek certain pluperfect forms remained unaugmented.

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Towards Coherent Infinitival Patterns in the History of German

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1. According to Haider (2010), we have to distinguish three types of infinitival complements in Present-Day German: (i) CP complements, (ii) VP complements and (iii) verbal clusters. While CP complements give rise to biclausal structures, VP complements and verbal clusters indicate a monoclausal structure. Non-finite verbs in verbal clusters build a syntactic unit with the governing verb. It is only the last infinitival pattern, that we address as so-called coherent infinitival pattern, a notion introduced in discussions on infinitival grammar by Bech (1955). A necessary condition for the formation of coherent infinitival constructions is an underlying OV order, hence the well-known differences regarding infinitival syntax in German and English (Haider, 2010). On the widespread assumption that German has been an OV language through-out its history, we expect all three types of infinitival complements to be present from the earliest attestions of German. In the present paper, I show that this expectation is not borne out: We find infinitival complements projecting either CPs or VPs in older stages of German, while verbal clusters are a quite recent phenomenon in the history of German as already suggested in work by Askedal (1998), Demske (2008) and Maché & Abraham (2011). In line with current beliefs that German is underspecified as regards the direction of government in earlier stages of its historical development, I argue that the growing stabilization of an OV grammar during the 16th century generates word order patterns triggering the formation of verbal clusters.

2. In Old High German (= OHG), there is plenty of evidence that infinitival complements occur in mono- as well as biclausal infinitival constructions. Support for monoclausal structures in OHG comes from infinitival constructions where an argument of the non-finite verb is promoted to the subject of the governing predicate, exemplified with the ergative verb *gilimphan* ›befit‹ and two different passive constructions, i.e. modal passive constructions (Demske-Neumann, 1994) and so-called long passives (Demske, 2008).

(1) a. *thiu gilimph-ent mir zihalonne* (T 226.3)
they.PL befit-PL me.DAT to-bring
'I have to bring them'
b. *ter únderskeit ist ze ságenne.unde mit exemplis ze lêrenne* (N BInt 65.7)
the.NOM difference is to say and with examples to impart
'the difference is to be named and to impart by way of examples'
c. *thiu erloubit ni-uuar-un imo ziezzanne* (T 105.27)
which.PL allowed NEG-were-PL him to-eat
'(the breads) which were not allowed to eat to anybody'

Classical diagnostics such as extraposition indicate that monoclausal infinitival constructions are rather instances of VP complements (as in Present-Day English) than verbal clusters, since extraposition patterns are not only attested with control verbs (2b) but also with verbs obligatorily clustering in Present-Day German (= PDG) such as modal verbs (2a), perception verbs and causatives.

(2) a. *táz tu dánne múgîst [taz uuâra lîeht keséhen]* (N *BCon* 40.11)
that you then might the genuine light see
'that you might see the genuine light then'
b. *Âne daz er únsih lêret [diemuôte uuésen]* (N *Ps* 132.11)
without that he us teaches humble be
'without him teaching us to be humble'

The historical findings hence suggest that infinitival constructions fall in two classes in OHG: Infinitival complements are either VPs or CPs. In addition, sequences of verbs in clause final position support Haider's (2014) assumption that the directionality of verbal heads is un(der)-specified in OHG.

3. Over the course of the 16th century, we observe overwhelming evidence for the stabilization of an OV grammar in German. As regards infinitival syntax, the historical record testifies to a massive increase of infinitival complements in clause-internal positions at the expense of their extraposed counterparts. Considering two-place predicates at the right edge of a clause, V_2V_1 becomes the unmarked pattern, whereas the frequency of V_1V_2 considerably decreases through-out the 16th century (Ebert 1981). Still, extraposition is not a reliable diagnostic for biclausal infinitival constructions, since verbs restricted to the cluster construction in PDG allow for extraposition also in the 16th century. At the same time, infinitival complements excluded from the cluster construction in PDG are attested clause-internally (this also holds for adverbial infinitives). Both word order patterns hence do not unambiguously correlate with a particular structure of the infinitival construction. Instances of pronoun fronting (3), however, suggest that the emergence of verbal clusters is well under way in the 16th century.

(3) *weilen aber nichts fürtreffliches geschehen/ habe ich* ***sie****/* (AC 19.4)
because however nothing exceptional happened have I her
vmb kürtze willen/ hieher zu setzen vnterlassen
for space reasons here to put refrained

'while nothing exceptional has happened I have refrained from putting her here for space reasons'

4. Because of parsing difficulties with left-branching OV grammars (Haider 2010), the need for verbal clustering increases during the 16th century, as soon as the embedding of infinitival complements becomes a widely used pattern in German. The emergence of a spoken standard language over the course of New High German might have given a further boost to the formation of the easier to parse verbal clusters. Overall, the rise of verbal clusters in the history of German gets a straightforward explanation, when we take into account changes affecting the underlying word order throughout the history of German.

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From ideophonic adverb to verb:Another instance of self-organisation in languages

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Within historical linguistics, notions such as genetic inheritance, areal contact, drift and Universal Grammar have been invoked in order to explain structural similarities between languages. The notion of "self-organisation" (or parallel development between unrelated languages without any areal contact being involved) has received much less attention. This explanatory mechanism has found adherents mainly in the domain of phonology (e.g Wedel 2011), and to some extent in morphology (e.g. Ke, 2004).

The present author has tried to argue in a number of publications (e.g. Dimmendaal 2011: 365-370) that the scope of self-organisation based accounts can be extended to a range of other grammatical patterns. For example, the widespread tendency to develop verbal compounding in languages with converbs can be explained this way.

The main purpose of the present contribution is to show that self-organisation also helps to explain the widely observed tendency in languages to change ideophonic adverbs into main predications (mainly verbs). Evidence for this widespread tendency can be found in a wide variety of languages. McGregor (2001) gives examples from different languages in northern Australia, where ideophonic adverbs are the frequent source for uninflecting verbs. The latter in turn form a compound verb with inflecting verbs. Akita (2009) gives examples of such peripheral elements also being used as verbs in Japanese. Akita (personal communication, quoted in Dingemanse 2011) points out that the more frequent such mimetic forms are, the more easily they can be used as verbs in Japanese. In his study of ideophones in the Niger-Congo language Siwu (spoken in Ghana), Dingemanse (2011) observes that the majority of ideophone types in his corpus of everyday conversation in this language occur just once. However, a small number of ideophones occurring with higher frequency also occur in (what Dingemanse calls) "bound constructions", i.e. they are subject to "ordinary morphosyntactic operations".

In my presentation, I will give additional examples from other African languages where similar phenomena can be observed. I will try to show that self-organisation in grammar helps to explain such parallel structures. Central to this explanatory model for such parallel developments between languages will be the "usage-based theory" of Joan Bybee. Bybee (2009: 69), for example, claims that "[t]he use of the same sounds, words, and patterns over thousands of usage-events has an impact on the cognitive storage and processing of linguistic experience that gives language its structure." She furthermore claims that constituent structure is the result of chunking and constituent structure internal to a chunk is maintained by the cognitive association of the words or morphemes in a chunk to other instances in cognitive storage of the same words or morphemes. Since these associations can be weaker or stronger, depending upon the frequency of use of the chunk, contexts of use and meaning, constituent structure can change gradually (Bybee 2009: 73).

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Alignment, Diathesis, and Aspect: The development of the perfects and middles in Early Indo-European

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Considerable evidence has been assembled (Wackernagel 1904; Reichelt 1909: 309; Renou 1925; Chantraine 1927; Schmidt 1964; Di Giovine 1990; Gamkrelidze & Ivanov 1995) to demonstrate that the oldest reconstructable value of the synthetic perfect in Indo-European was not anterior but intransitive and stative. Alongside these long-standing claims can be placed the independent classical arguments of Stang (1932) and Kuryłowicz (1932) that the Indo-European categories of perfect and middle must be connected, based on the evidence of Sanskrit, Greek, and Hittite. In this paper, I present an updating of these arguments through an examination of recent work on the interrelated role of alignment, diathesis, and aspect in the development of perfects and middles of Early Indo-European. The stratified reconstruction of Neu (1976, 1985, 1989), for example, which includes the proposal for a third diathesis, the Activoperfectum, has stirred up considerable controversy concerning the nature of the relationship of perfects and middles. Recent studies of the perfect in Indo-Iranian (Kümmel 2000) and Homeric Greek (Romagno 2005) explore the role of telicity, agentivity, and affectedness in the development of the perfect. An increased interest in the role of alignment and valency has led to new perspectives on the role of intransitivity and unaccusativity in the development of the Early IE verbal system (Drinka 1999, 2003; Benedetti 2002; Romagno 2002).

Among the impressive analyses emerging in recent years is the work of Romano Lazzeroni, who draws from new work on alignment, diathesis, and aspect to construct innovative solutions to old problems. Lazzeroni (1990; in press), for example, follows Neu in claiming that the perfect and the middle both developed from an ancient stative category, but he demonstrates that there is no need to reconstruct a third diathesis, the Activoperfectum, if one regards the perfect and the middle as complementary subcategories of stativity, the perfect representing a state viewed as a produced result, the middle a state viewed via the act of production—in essence, "attained state" vs. "[become state]" (Dowty 1979). Lazzeroni (2012) goes on to position the perfect on a continuum, with the early

unaccusative stative at one pole and the more recently-created objective resultative at the other: the stages between are shaped by factors such as valency and verbal actionality, and demonstrate the growing tendency for the perfect to be incorporated into the tense system, following a path not unlike that followed by the middles at an earlier time. In his innovative interpretation of complex evidence, then, and in his incisive solutions to age-old problems, Lazzeroni not only provides answers but also poses fresh, provocative questions.

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What diachrony tells us about the pro-drop parameter

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1. Two views on parameters and their diachronic mirror. A debate that is often implicit in different approaches to syntactic change is the question of its universality. Descriptive typological accounts (e.g. diachronic typology) assume this universality, while formal accounts experienced a shift in the thinking paradigm (Gallego 2011): (i) the P&P view relied on the existence of UG parameters, which included two or more settings; (ii) a recent trend in minimalism tries to reduce the properties of UG to general principles and interface conditions. As for historical accounts, finding a stable path of change from one setting into another could be an argument in favor of the classic parameters. However, proving that what looks like a universal change from a setting into another in different languages is not a unified phenomenon can be an argument against the classical concept of parameter.

2. The core hypothesis. We argue that at least certain parameters can be reduced to bundles of properties which, together, produce the effect that some languages are more similar between them than with respect to others. In this sense, we adopt Boeckx's (2011) suggestion about the "clustering effects", discussed by e.g. Biberauer (2008): similar linguistic properties tend to "cluster" in similar patterns, but leave room for at least slight differences in this clustering way. If we prove the existence of different change pathways, which stem from contingent / environmental acquisitional ("second factor") reasons, giving rise to slight differences between languages, we can achieve a satisfactory explanation for those parametrical "mismatches".

3. Change in the patterns of pro-drop. We check this hypothesis on the "pro-drop parameter", exploring the idea that pro-drop is not a uniform syntactic phenomenon, but merely a PF-phenomenon (deletion) which is affected by particular morphosyntactic properties in different ways in different languages.

The synchronic analysis. We adopt the hypothesis that null arguments, rather than inherently null pronouns, are *deleted* expressions (cf. Saito 2007, Sheehan 2007, Roberts 2010). Deletion is the operation that results in a syntactic object not being phonetically realized. Whether it involves PF-deletion (cf. Merchant 2001) or LF-copying (cf. Lobeck 1995, Saito 2007), deletion takes place late in the derivation, after syntax. Therefore, like copy-deletion (Nunes 2004) or VP-ellipsis (Goldberg 2005), pro-drop can in principle be blocked in a given derivation because of independent grammatical factors. This idea opens the possibility to explain the patterns of pro-drop across languages in terms of the blocking of deletion. For instance, it could be that the non-pro-drop phenomenon (e.g. English, German, etc.) reduces to cases in which deletion is blocked by independent grammatical properties (cf. Duguine 2013).

The diachronic analysis: pathways of losing consistent pro-drop. We explore this approach to the pro-drop phenomenon from the perspective of language change in the following sense: if grammatical factors of different kinds can block deletion, we predict that change in the patterns of pro-drop across languages can follow different paths, as they can be produced by different triggers. This fact has been noticed before in the literature, namely, in accounting for the diachronic paths developing non-NS patterns vs. partial-NS patterns (Roberts (2011) on French *vs*. Brazilian Portuguese (BP)). Here, we will argue that the loss of consistent subject-drop, yielding a partial-NS pattern, can also display different pathways of change. We will focus on two case-studies, BP and Russian; in BP, on the one hand, the emergence of new restrictions in licensing NSs correlates with the 'weakening' of the person inflectional paradigm (resulting from a rearrangement in the pronominal system; cf. Duarte 1993, Nunes 2011). In Russian, on the other hand, new bans on NSs arose from the rearrangement of the whole verbal system from tense-based into aspect-based, in conjunction with the loss of V-to-T movement and clitic auxiliaries (Jung 2014).

4. The contribution of language change to the parametric account. An important advantage of the analysis is that it solves a tension present in the diachronic studies of pro-drop. The (macro)parametric approach to language change views the loss of pro-drop as the change from one setting of the "pro-drop parameter" to another. The fact that non-pro-drop languages tend to have "poor" subject-agreement morphology (the so-called Taraldsen's (1980) Generalization) can make us postulate that changes in the properties of person/number verbal morphology trigger a change in pro-drop. This hypothesis is particularly interesting from the point of view of the parametric approach, because it constitutes the diachronic counterpart to the hypothesis that the nature of inflection place a crucial role in the licensing of null subjects (cf. Barbosa 1995, Alexiadou & Anagnostopoulou 1998). Nonetheless, it is not backed up empirically, as noted by Roberts (2011). It also contrasts strongly with the results obtained above on Russian, and other case-studies, which show that the relation between the weakening of agreement and the loss of consistent pro-drop is not a causal one (cf. *Sigurðsson* (1993) on Icelandic). Our analysis, on the other hand, reconciles the theory of change with the data, because it predicts that the loss of pro-drop can adopt a variety of pathways.

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Empathy in diachrony: the case of Classical Armenian *ink‘n*

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The aim of this paper is to address the distribution of the Classical Armenian pronoun *ink‘n*, as well as to examine its semantics and its role in discourse. Generally, the usages of *ink‘n* can be divided into three groups: it can be used as an intensifier, as a reflexive / discourse anaphor, and as a pronominal.

I. **Intensification**

This is probably the most common function of *ink‘n*. As an intensifier, it can be an adjunct either to an overt NP, or (more rarely) to a pronoun. In the vast majority of these examples we find *αὐτός* in the Greek and *ipse* in the Latin parallel texts. The following example illustrates this:

(1) *Ew ełe-w ənd xawse-l-n noc‘a ew ənd*

and become-AOR.3SG PREP speak-INF-DEF he.GEN.PL and PREP
*viče-l ew **ink‘n** isk Yisus merjec‘-aw ew*
argue-INF and himself indeed Jesus approach.AOR-AOR.3SG and
ert‘a-yr ənd nosa
follow-IPFCT.3SG PREP he.ACC.PL

And it came to pass, that, while they communed together and reasoned, Jesus **himself** drew near, and went with them. (Lk 24:15)

II. **Reflexivity and discourse anaphora**

There appear to be very few instances of *ink‘n* which could be analyzed as a reflexive proper:

(2) *Isk Yisus-i kočʻec‘-eal z-nosa **aṙ** **ink‘n** as-ē …*
but Jesus-GEN.SG call-PTCP PREP-he.ACC.PL near himself say-PRES.3SG
But Jesus called them **unto him**, and said … (Lk 18:16)

On the contrary, quite often *ink‘n* appears to be a discourse anaphor, that is, an anaphor lacking an antecedent in its local domain. The antecedent is usually found in a same-level clause. A typical case is this (see also Meyer 2013):

(3) *ew aha šaržumn mec ełew i cov-un*
and behold earthquake great become.AOR.3SG PREP sea-LOC.SG
minč naw-i-n cack-el y-alea-c‘ anti
while ship-GEN.SG-DEF cover-INF PREP-wave-ABL.PL there
*ew **ink‘n** nnǰē-r*
and himself sleep-IPFCT.3SG

And, behold, there arose a great tempest in the sea, insomuch that the ship was covered with the waves: but **he** was asleep. (Mt 8:24)

Also, sometimes long-distance binding into relative clauses is possible (clause-level anaphora in Meyer's terms):

(4) *Z-ays ibrew asac‘ Yisus el ašakert-awk‘-n handerj*
PREP-this when say-AOR.3SG Jesus go out.AOR.3SG disciple-INSTR.PL-DEF with
yaynkoys jor-oy-n Kedrovn-i
on that side valley-GEN.SG-DEF Cedron-GEN.SG
*ur ēr partēz y-or emut **ink‘n***
where be.IPFCT.3SG garden PREP-REL enter.AOR.3SG himself
ew ašakert-k‘-n iwr
and disciple-NOM.PL-DEF his

When Jesus had spoken these words, he went forth with his disciples over the brook Cedron, where was a garden, into the which **he** entered, and his disciples. (Jn 18:1)

III. *ink‘n* as a pronominal

Since there are few examples (see (5)) where *ink‘n* would be best interpreted as a pronominal, I do not think that they should be considered to be of much significance.

(5) *anka-wi veray eres-ac‘ iwr-oc‘ aṙ ot-s*
fall-AOR.3SG upon face-ABL.PL his-ABL.PL near foot-POSS
*nora ew gohanay-r z-nmanē; ew **ink‘n** ēr Samarac‘i*
he.GEN.SG and satisfy-IPFCT.3SG PREP-he.ABL.SG and himself be.IPFCT.3SG Samaritan

And fell down on his face at his feet, giving him thanks: and he was a Samaritan (Lk 17:16)

The use of *hic* in Latin and *тъ* in Old Church Slavonic suggests that a pronominal interpretation would be most plausible.

These are the main functions of *ink'n*. It seems that a unitary approach based on the notions of *empathy* and *discourse topic* would best account for them. Topic is, roughly, the discourse referent the current sentence or a bigger segment of discourse is about. Following Kuno, I will define empathy as 'the speaker's identification, which may vary in degree, with a person/thing that participates in the event or state that he describes in a sentence' (Kuno 1987: 206). Kuno has also proposed a number of hierarchies associated with this notion, one of which is the *Topic Empathy Hierarchy*: it is easier for the speaker to emphasize with the discourse referent which is the current discourse topic.

The prominence of empathy and topic is most evident with *ink'n* in its intensifying use: intensifiers with NPs serve either to indicate the remarkability of a certain individual as a participant of a certain event, e.g. (1). *ink'n* without an NP is used to shift the topic from one referent to another, or to (re)introduce it. Indeed, *ink'n* is often found when a direct speech ends and a narrative begins. As concerns other uses, they are certainly syntactically secondary to the intensifying use. Non-intensifying usages can be seen as a result of bleaching of the original semantic pattern as well. But they have not completely lost their empathic orientation: as a rough generalization, discourse anaphora and clause-level anaphora operate very much like intensifiers at lower levels of discourse, i.e. a sequence of a small number of clauses and a sentence, respectively. In either case there is a choice: whether or not to use an intensifier within a NP and whether or not to use *ink'n* instead of pro or *na*. The topicality of *ink'n* correllates nicely with the fact that in the vast majority of instances *ink'n* (or the NP it is adjoined to) is the sentence subject[4].

The reflexes of *ink'n* are present in modern Armenian. Sigler (2001) has argued that Western Armenian *ink'* displays some features characteristic of logophoric pronouns. A more recent study by Donabédian-Demopoulos (2007) has shown that *ink'* is not a purely logophoric pronoun, since it is freely used in primary discourse, but rather signifies a high degree of empathy (proximity of a certain discourse referent and a speaker, in terms of Sigler), which results in logophoric interpretation in reported discourse. In literary Eastern Armenian *ink'n/ink'ə* is most commonly used as an intensifier and sometimes also functions in clause-level anaphora (Dum-Tragut 2009). However, in colloquial EA, as Bezrukov (2010) reports, it has become a standard 3rd person pronoun, at least since the 19th century, whereas *na* is very rare, if at all present. So, it can be assumed that the semantic bleaching has been completed in (at least colloquial) EA, but not in WA, where the empathic orientation has increased.

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[4]Also, this interpretation is corroborated by cross-linguistic data. For similar analyses, see Hertzenberg 2011 on Latin and Zribi-Hertz 1989 on English.

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Prefixation and verb classification in Old Church Slavonic

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Janda et al. (2013) argue that modern Russian verb prefixes are verb classifiers, in the sense of MacGregor (2002). They classify unbounded simplex verbs into broad, semantically motivated classes of bounded verbs. This is also the case for so-called "natural perfectives", i.e. prefixed perfective verbs that occur in aspectual pairs with simplex verbs: such perfectives also have semantically motivated classifier prefixes. In this paper I turn to Old Church Slavonic (OCS), as the earliest attestation of Slavic, to look for the origins of this system.

There is little agreement in the literature on early Slavic aspect as to the nature of the OCS aspect system. Does the past-tense distinction between aorist and imperfect express aspect? Do (incipient) verb pairs express aspect? And if so, which verbs are perfective and imperfective? How can we decide what constitutes a pair? Using OCS and Greek parallel data (Codex Marianus and Codex Zographensis as found in the PROIEL/TOROT treebanks[5]), ANONYMISED (to appear) conclude that

- the imperfect and the aorist express viewpoint aspect, since they follow the Greek distribution in over 90 % of the cases
- most OCS verbs have specialised with one aspect or another
- the specialisation is so robust that the verbs can express aspect on their own (compare with e.g. Greek infinitive, subjunctive); in particular, prefixed verbs are generally both telic and perfective
- we can identify aspectual pairs by looking at translations of individual Greek verbs

The Marianus and Zographensis constitute a small dataset, but a number of verb pairs can still be identified. The most stable pairs are prefixed perfectives with prefixed suffix-derived partners (*pri-*

[5] PROIEL: foni.uio.no:300, TOROT: nestor.uit.no.

stǫp-iti/pri-stǫp-ati ‘approach’, *na-čę-ti/na-čin-ati* ‘begin’, *o-stav-iti/o-stavl-jati* ‘leave’) (49 pairs). We can also identify 46 verb pairs where a simplex verb is partnered by a prefixed perfective verb. However, it is important to note that these pairs are far less stable than the pairs where both partners bear the same prefix, in that the simplex verb in many of them is still aspectually neutral. Also, very few of these verb pairs involve natural perfectives in the sense of Janda et al. (2013) – most of the perfective partners have additional procedural meanings: mostly they are ingressives, usually prefixed with *vъzъ-*, and a few delimitatives, mostly with *po-*. We only find 13 pairs where the simplex is partnered by a verb with completive/resultative semantics (*tvor-iti/sъ-tvor-iti* ‘make, do’, *uč-iti/na-uč-iti* ‘teach’). Since the simplex verb is often aspectually neutral, the prefix is not always required to get a perfective reading, it can be done using the inflectional system alone. We may therefore conclude that OCS natural perfectives are in their infancy, and that OCS therefore does not yet have a verbal classifier system.

Nonetheless, we find that the few arguable natural perfectives in OCS are similar to the modern Russian ones in two important ways. First, they display a wide range of prefixes (10 different ones, all of which are also used in natural perfectives in modern Russian). Second, the choice of prefix is not random, but motivated by association with specific semantic groups of verbs.

Consider the example of *sě-jati/vъ-sě-jati* ‘sow’. Both translate Greek *speirō* ‘sow’. The simplex *sě-jati* is aspectually neutral in the sense that it occurs both in the aorist/past participle (perfective inflectional forms) (1) and the imperfect/present participle (imperfective inflectional forms). The prefixed verb *vъ-sě-jati* is used to indicate that a single act of sowing or a sowing session is completed (2).

(You knew that I am a hard man, taking out what I did not put in)

(2)	i	žьnę	egože	ne	**sěxъ**
	and	reaping	which	not	sow.AOR
	kai	therizōn	ho	ouk	espeira
	and	reaping	which	not	sow.AOR

‘and reaping what I did not sow’ (Mar. Lk. 19:22)

(The kingdom of heaven is like the mustard seed)

(2)	eže	vьzemъ	člověkъ	**vьsě**	na	selě	svoemъ	
	which	taken	man	sow.AOR	on	field	his	
	hon	labōn	anthrōpos	espeiren	en	tōi	agrōi	autou
	which	taken	man	sow.AOR	on	the	field	his

‘which a man took and sowed in his field’ (Mar. Mt.13:31)

When we look at verbs prefixed with *vь-* in the dataset, we see that they can all easily be assigned the semantics ‘into’. We also see that *vъ-sě-jati* belongs to a larger group of verbs meaning ‘put, insert’, such as *vь-lož-iti* ‘put into’, *vь-li-ti* ‘pour into’. This is exactly the same pattern as we find in modern Russian: natural perfectives are formed with semantically motivated prefixes.

To conclude, in OCS we can clearly see the roots of the modern Russian system. However,

prefixes are not yet obligatory in order to convert an unbounded activity or state into an event in OCS. This can still to some extent be done by using the inflectional aspect system alone. It therefore seems reasonable to claim that OCS does not (yet) have a verbal classifier system

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Anticipatory distant "voicelessness" assimilation in Basque

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Certain assimilations, such as that of nasality, rhoticity, palatality or velarity, are common among the world's languages. Other assimilatory sound patterns are far from being that frequent. In Basque, a sequence of an onset voiced stop followed by an onset (aspirated) voiceless stop in the next syllable is resolved with devoicing of the first of these stops –i.e., *D > $T^{(h)}$ /_V(C).$T^{(h)}$V(C). The devoiced word-initial stop typically surfaces with aspiration in the Eastern Basque dialects, while the previously aspirated stop losses it. (Example 1) shows this sound pattern in native words.

This anticipatory assimilation is especially productive in the case of early Romance loanwords, given that word-initial voiceless stops underwent regular voicing in their adaptation to Basque (Example 2). Later, voiced stops –both the etymologically voiced stops as well as stops voiced through loanword adaptation– underwent devoicing when followed by a voiceless stop in the next syllable as described above (Example 3). These sound patterns have been described since the early literature on the historical phonology of the Basque language (cf. Michelena 1977). However, this anticipatory assimilation of voicing has not applied in some specific contexts, namely when the voiceless stop was preceded by a sibilant –/s̪/ and /s̪/ (Examples 4-5).

Although some instances of assimilation of voicing can be found in the literature (cf. Jakobson 1978; Hayes 1984), this kind of distant voicing assimilation is not typologically common. In this paper, I will propose that this process affects aspiration instead of voicing. In this approach, the aspiration of the stop is reanalyzed as originating in the first stop of the word instead of the second, in an instance of perceptual metathesis (cf. Blevins & Garrett 2004).[6] Given that aspiration is phonetically realized as longer VOT (and no aspirated voiced stop is attested in Basque), the newly aspirated stop becomes devoiced. This approach would also account for the blocking contexts, since stops following sibilants are never aspirated in Basque (Michelena 1977),[7] and thus these stops would not be subject to the

[6]Segmental metathesis of the aspiration is attested within the Basque language (cf. Egurtzegi 2014).
[7]As occurs, for example, in English.

metathesis proposed above.

This phonetically natural approach to the Basque devoicing sound pattern is the first to account for the described blocking contexts. It is also the first approach to account for the observation that stop aspiration occurs in the second syllable in non-assimilated forms while, in forms that resulted from assimilation, aspiration occurs in the word-initial stop instead.

(1) Assimilation in inherited words:

Older form		Innovative form	
gurpil	>	*kurpil*	'wheel'
galte	>	*kalte*	'damage, loss'
bekorotz	>	*pekorotz*	'manure'

(2) Initial voicing in old loanwords:

Romance		Basque	
paradīsu	>	*baradizu*	'paradise'
camellu	>	*gamelu*	'camel'
ceresia	>	*gerezia*	'cherry'

(3) Assimilation in old loanwords:

Romance		Older Basque form		Innovative form	
catena	>	*gathea*	>	*khatea*	'chain'
corpus	>	*gorphutz*	>	*khorpitz*	'body'
peccatum	>	*bekhatu*	>	*pekatu*	'sin'
pacem	>	*bakhe*	>	*pake*	'peace'

(4) Inherited words with no assimilation:

gazta	'cheese'	*gazte*	'young'	*beste*	'other'
guzti	'all, whole'	*gaizto*	'evil'	*busti*	'wet'

(5) Old loanwords with no assimilation:

Romance		Basque	
castellu	>	*gaztelu*	'castle'
castanea	>	*gaztaina*	'chestnut'
**tastatu*	>	*dastatu*	'taste, try'

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From *englisc* to *what-ish*: on the diachrony of *–ish*-suffixation

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In the course of English language history, the derivational suffix *-ish* has extended its range of application considerably (for previous accounts, see Marchand 1969, Malkiel 1977, Quirk et al. 1985:1553). Used in Old English chiefely to derive ethnic adjectives (e.g. *englisc* 'English', *denisc* 'Danish') and marginally also denominal adjectives (e.g. *cildisc* 'childish', *deuelisc* 'devilish'), *-ish* became more common as of Middle English and subsequently underwent a number of changes. Thus, *-ish* gradually extended the set of bases to which it attached, starting with primarily monosyllabic adjectives (e.g. *bluish*, *darkish*, *oldish*) in the 14th century, with numerals (1) and proper names (2) from the 19th century, and, more recently, with increasingly more complex bases, e.g. compounds (3), phrases (4) or clauses (5):

(1) I guess he was sort of *12**ish*** when he invented the Scuba Scope. (1998 [COCA])
(2) She offered a very *Han Solo-**ish*** grin in response. (2009 [COCA])
(3) But I had to climb the *fire-escape-**ish*** stairway. (1995 [COCA])
(4) It's the soccer uniform: it emphasizes his extremely *young boy**ish*** looks - scrawny legs, underdeveloped arms. (2003 [COCA])
(5) *I know the answer-**ish*** but I need backup (2009 [Web])

Coinciding with the extension of the word formation pattern are semantic changes, which ultimately distort a former more or less consistent form–function mapping: the earliest *-ish*-formations denoted a quality belonging or pertaining to the nominal element – a function eventually ousted by rivalling affixes such as *-y* and *-ous* (cf. Dalton-Puffer 1996:173), whereas the semantics of *-ish* later on rather came to indicate a relation of similitude or, as in the case of adjectival bases, an approximative quality. This strongly subjective sense further develops into a stance marker, a usage that is particularly evident in instances where *-ish* occurs as an autonomous element as in (6):

(6) You must try to remember that some people are normal. ***Ish***. (1990 [BNC])

In a large-scale corpus-based study drawing on a wide array of historical and contemporary corpora (*Dictionary of Old English Corpus*, *Penn Corpora of Historical English, Lampeter Corpus*, *Early English Prose Fiction*, *Eighteenth Century Fiction*, *Nineteenth Century Fiction;* BNC, COCA), this paper provides one of the first empirical analyses of the intricately related semantic and functional changes that *-ish* underwent in its development from a rather neutral affix to a subjective discourse marker. By investigating the distribution of *-ish*-formations from both a morphological and syntactic perspective, this paper sheds light on the productivity of the suffix, which does not only become

evident in the numerous *hapax legomena* (cf. Plag 2008:545), but also in the trajectory of change itself in which *-ish* occurs in new syntactic contexts and new functions. Thus the paper also seeks to provide an empirical answer to the question of what kind of language change process affects *-ish*: degrammaticalization, as claimed by Norde 2009, or rather a less clear-cut unidirectional language change as suggested by the notion of constructional change (cf. Traugott/Trousdale 2013, Hilpert 2013).

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Verb-particle combinations in English and Italian: A diachronic comparative perspective

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In this paper, we present a diachronic comparative study of English and Italian Verb-Particle Combinations (VPCs), exemplified in (1) and (2) respectively.

(1) (a) Mary **peeled off** the sticker.
(present-day English)

(b) and the weyghte **presseth** the erthe **adoun**, …
and the weight presses the earth down
'and the weight presses the earth down, …'

(Middle English, PPCME2, CMBOETH, 435.C2.296)

(2) (a) Luca ha **lavato via** la macchia
Luca have.3sg wash.part.past away the stain
'Luca removed the stain (by washing)'
(present-day Italian, from Masini 2005:149)

(b) et inconte<ne>nte **trasse fore** le spata e volcelo uccidere
and immediately he.pulled out the sword and he.wanted.him.CL.ACC to.kill
'and he pulled out the sword immediately and he wanted to kill him'
(Old Neapolitan, delle Colonne, *Libro della destructione de Troya* 1, p.49)

VPCs are very common in Germanic languages, but are much less well-attested in Romance languages. Among the Romance languages, Italian has the largest number of VPCs (particles include *via* 'away', *giù* 'down', *su* 'up', *fuori* 'out') and the origin and characteristics of Italian VPCs have attracted attention in recent literature (e.g. Masini 2005; Iacobini & Masini 2007; Iacobini 2009).

Part of the interest in Italian VPCs lies in the fact that their presence in Italian is unexpected in terms of Talmy's (1985) typology of verb-framed languages, of which Italian is an example, and satellite-framed languages, such as English. Several hypotheses about the origin of Italian VPCs have been put forward in the literature, including the 'contact hypothesis' (see e.g. Simone 1997) and the 'typological-structural hypothesis' (e.g. Masini 2005; Iacobini & Masini 2007), but none of the hypotheses are able to fully explain the Italian VPC facts (Groothuis 2014).

Masini (2005:165) observes that Italian VPCs are similar to present-day English VPCs in several respects, more so than to VPCs in other Germanic languages, such as Dutch and English. She notes, for example, that both English and Italian "feature the emergence of postverbal particles and the decline of verbal prefixes", and that "in both languages particles seem to have developed aspectual values out of locative ones" (p.165).

Besides similarities, there are also a number of notable differences between English and Italian VPCs, including word order. English transitive VPCs typically show a word order alternation, with the particle either preceding the object (V-Prt-Obj, the particle order) or following the object (V-Obj-Prt, the predicate order), shown in (3). Italian transitive VPCs, however, predominantly occur in the particle order; the predicate order is much less common and restricted by a number of factors, including speech type (it is attested in spoken language) and information structure (cf. Masini 2005:148,n9; Iacobini & Masini 2007:165,n14), (4).

(3) Mary **peeled** (**off**) the sticker (**off**).

(4) Luca ha **lavato** (**via**) la macchia (?**via**).

In this paper, we examine the diachronic development of Italian VPCs, comparing it to that of English VPCs. Our aim is twofold: to gain a better understanding of the Italian facts, and to add to our knowledge of the developmental path(s) of particles cross-linguistically. We will show that Talmy's two-tiered typology has to be extended (see Groothuis 2014, following Son & Svenonius 2008) in order to account for the similarities and differences between the two languages. We will further show that the observed similarities and differences between VPCs in Italian and English can (partly) be explained in terms of the extent to which particles have grammaticalised (see Los et al. 2012).

Our diachronic Italian data are drawn partly from *Opera del Vocabolario Italiano* (Larson & Artale 2005) and partly from existing work (e.g. Iacobini & Masini 2007; Iacobini 2009; Groothuis 2014; among others). Our diachronic English data are mainly drawn from *The Penn Parsed Corpora of*

Historical English (e.g. Kroch & Taylor 2000) as well as from existing work (e.g. Elenbaas 2007; Los et al. 2012).

Our theoretical framework is Ramchand's (2008) First Phase Syntax, characterised by the decomposition of the verbal domain, which is able to account for the typological-structural similarities and differences between Italian and English.

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This paper studies the expression of possession in medieval Spanish in order to explore new insights into the study of complex sets of variable phenomena. Using data from a parallel corpus of Old Spanish Bible translations and a multinomial regression analysis, we are able to map changes in the expression of the entire semantic domain of possession, and evaluate these changes for statistical significance.

The expression of possession in medieval Spanish constitutes an intricate cluster of variable phenomena. There is a wide number of possessive structures: possessive adjective with or without article (*(la) su casa* '(the) his house'); genitive phrase with a personal pronoun (*la casa de él* 'the house of him'); and structures such as dative pronouns, or even zero marking when the relation of possession can be inferred from the context. The distribution for each one of these variants correlates with a complex set of structural and contextual factors. For instance, the frequency of article plus possessive (as opposed to possessive alone) is conditioned by features of the possessor (person, number), the possessed entity (animacity) and the syntactic function of the NP containing the possessive structure (Wanner 2005: 39); moreover, its appeareance is also related to contextual factors, such as expressivity, solemnity, and poeticality (Lapesa 2000).

This study uses a parallel corpus of Spanish medieval translations of the Bible (www.bibliamedieval.es) in order to analyze in a more controlled manner the different factors that condition variation in the expression of possession in Old Spanish. By locating the possessive structures in the Hebrew or Latin original and then looking at their equivalents in a number of Spanish translations we can observe the variation exhibited by possessive structures –including zero marking– that can occur in the same linguistic environment. Since the Bible includes a variety of registers (i.e. narrative, lyrical poetry, wisdom literature) the corpus also allows for a more controlled analysis of stylistic variation.

Our study is based on a data set of more than 5000 tokens of 13th and 15th century possessive constructions translated from the Latin or Hebrew Bible. Since these data are highly controlled for context, they allow for elaborate statistical analyses. Using conventional binary regression analysis would skew the results in that only two variants could be analysed (e.g., the difference between the use of possessive adjective with or without an article). Consequently, we apply multinomial regression analysis to model the influence of more than ten structural and contextual parameters on the global distribution of all of the variants of possessive constructions, effectively mapping the entire domain of the expression of possession in medieval Spanish as well as its change over time. Our analysis evinces the changing balance between structural and contextual constraints on the use of these different variants diachronically: whereas in the 13th century, structural and contextual constraints are almost equally important, in the 15th century, the importance of these structural constraints has diminished. This result thus illustrates how in reductive processes of language change, variation due to structural constraints yields to stylistic variation.

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Intervocalic /d/ in the Iberian Peninsula: past participles vs. other word types

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The loss of intervocalic /d/ in Spanish has been widely studied from different perspectives: diachronic studies talk about the outbreaks of this phenomenon in the transition from Latin to Spanish and between the 14th and 16th centuries (Pensado Ruiz 1984, Ariza Viguera 1989); synchronic studies, for its part, deal with the current situation of the consonant in depth, but only within a city or a small region (Molina Martos 1998, Bedinghaus and Sedó 2014); finally, general descriptions of the phonetics and phonology of Spanish talk about the phenomenon, but not in depth (Alarcos Llorach 1950, Piñeros 2008). Thus, there has been no study dealing with the peninsular situation of the phenomenon in the 20th century, which is the approach that I decided to adopt here.

Some of the linguistic factors of change that have been proposed in the literature are the following: vocalic context (Bedinghaus and Sedó 2014), grammatical category (Narbona, Cano and Morillo 1998), stress position (Pensado Ruiz 1984), morphological nature of the element containing the /d/ (Menéndez Pidal 1989) and frequency (Bybee 2002, Díaz Castañón 1975).

All the authors that deal with this phenomenon agree that currently the context /ado/ in the past participles is the most conducive to loss. My goal in this study was to observe the differences that can be seen between past participles of different conjugations, their respective feminine forms (as adjectival participles, since Spanish doesn't allow gender inflection of verbal participles) and other word types with similar structure –that is, similar accentual structure and vocalic context. In this way, I investigate the role of frequency in the evolution of this phenomenon.

I based my analysis on data from 21 questions of the *Atlas Lingüístico de la Península Ibérica* (*Linguistic Atlas of the Iberian Peninsula*), which collects a sample of linguistic uses of the Peninsula and the Balearic Islands in the years before the Civil War (1931-1936). The informants were mostly uneducated men and women who lived in rural areas and, therefore, sociolinguistic factors cannot be taken into consideration in this study.

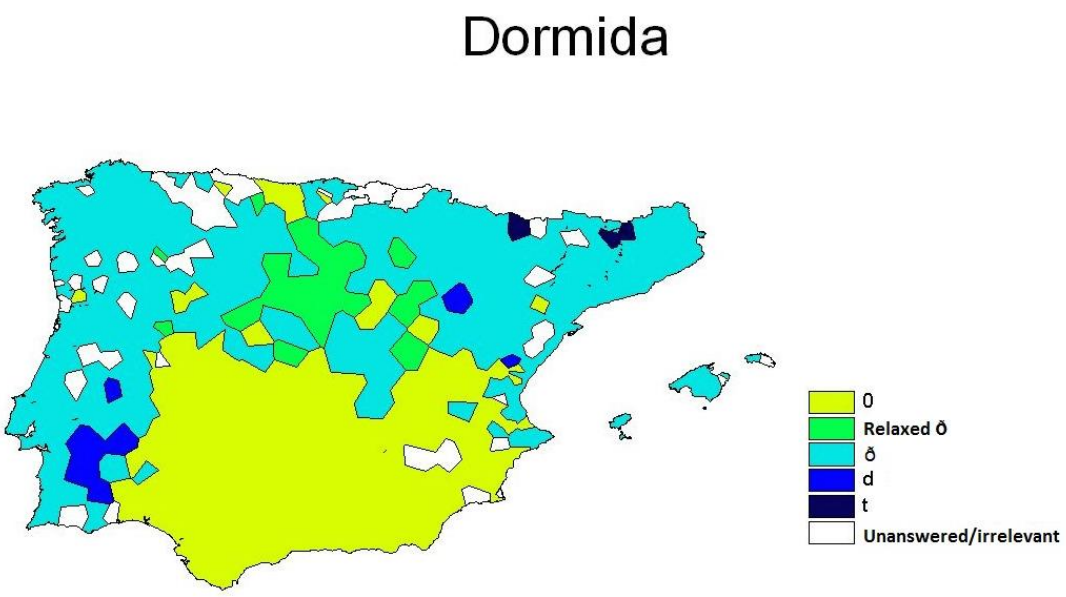
The data (presented in maps such as the one below) show that all words containing /ado/ with the same phonetic structure as the past participles undergo elision equally; this suggests that, in this context, factors such as grammatical category or morphological nature of the element do not play any significant role. That doesn't seem to be the case with /ada/, /ido/ and /ida/, which show significant differences between past participles and everything else, with more lenition among participles. It can also be seen that masculine forms undergo more elision than feminine forms in almost all the examples. The causes of these different behaviours are various, and apparently interact with frequency:

-Grammatical category.

-Morphological nature of the element containing the consonant.

-Vocalic context and vocalic result.

-Number of syllables.



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Induction of Phonology and Morphology for the Normalization of Historical Texts

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This paper presents a proposal for normalization of historical texts based on our experiments on a 17th century literary work in Basque. The starting point has been a previous research on the processing of dialectal texts. The research has been now extended and tested using old texts with the hypothesis that the annotation of a small piece of corpus is enough to obtain good results in the normalization of diachronic texts. A semi-supervised method for phonological induction is evaluated. The results are positive, getting around 84% performance rate in the experiments.

Introduction

Historical documents exhibit a number of differences in comparison to modern languages, which have a significant impact on Natural Language Processing (NLP) [Piotrowski, 2012]. Historical and dialectal texts show similar characteristics from the NLP point of view since they become problematic when we try to apply developed NLP tools to those types of texts. Lexical normalization is used for historical and dialectal texts in order to link each variant to its corresponding standard form. Once the texts are normalized, the standard NLP and IR tools can be applied to the corpora with a high performance. By carrying out the normalization/canonicalization before indexing historical texts, it is possible to make queries using standard words or lemmas and find their historical variants. This way, ancient documents become more accessible for non-expert users.

The scenario

In this paper, we propose an approach for the normalization of historical texts. It is supposed that the corpus is digitized and that OCR has been carried out. A unique book (or a collection of them in case they are available from the same historical period or dialect) will be the processing unit. In this scenario, long parallel texts are not available and SMT-like approaches (statistical machine translation) are therefore excluded.

For the normalization of historical texts, we propose an approach based on the induction of phonology and morphology. It is a lightly supervised solution in order to get a good performance of the system without the need of an unrealistic amount of manual effort. The supervision is restricted to the nonstandard words and their corresponding standard forms that have been annotated in a short piece of text. Therefore, the annotator should be an expert in historical texts, but it is not necessary to be competent in NLP.

Related work

The above mentioned normalization is carried out using the following three techniques:

• Hand-written phonological grammars are the most habitual solution, but this kind of techniques do not fit in our scenario.

• Unsupervised techniques: systems work without supervision. The edit-distance or phonetic distance (i.e Soundex) algorithms are the most popular solutions

• Machine-learning based techniques: systems learn or tune from examples of standard-variant pairs. We are interested on this kind of solutions.

Experiments on diachronic Basque

We carried out previous work in the normalization of Basque dialectal texts, where we evaluated different methods to learn a model from a standard/variant parallel corpus. This model translates a given dialectal word into its corresponding standard form. All the methods were based on finite-state phonology. These methods were reported in our previous work[blind].

In this work we have applied similar methods in the context of historical texts. We test the induction of a normalizator from a limited parallel corpus of standard/variant (10% (around 1000 words) for learning and 5% for test), given that an analyzer already exists for the standard language.

For testing the applicability of the method, we chose a 17th century literary work in Basque. The chosen text is the classical *Gero*, written by Pedro Agerre "Axular" and published in 1643. A small parallel corpus of historical and standard Basque was built and divided in two parts; one part to learn/tune the models and the other one to evaluate the results of the applied methods.

The tested method makes use of *Phonetisaurus* http://code.google.com/p/phonetisaurus/, a Weighted Finite State Transducer (WFST) driven phonology tool [Novak et al., 2012] which learns the phonological changes using the well known noisy channel model, which is very popular in speech recognition.

Concretely, we have used *Phonetisaurus* to obtain a grapheme-to-grapheme system. In practice, the application of the tool is straightforward and can be described in two steps:

• First, it is necessary to prepare the data from which the model has to learn. In our case, this is a dictionary containing the word pairs to learn in each part of the corpus.

• Afterwards, a model is trained using the prepared data. A Language Model training toolkit is necessary in this step for the n-gram calculations We have used the *NGramLibrary* for our experiments.

Once the model is trained and converted to a WFST format, it can be used to generate correspondences for previously unseen words and their corresponding standard forms. When there are multiple answers for a corresponding historical variant it becomes necessary to perform some filtering. The first filter is obvious: the answers that do not correspond to accepted standard words are eliminated. Among the rest of the words, the most probable answer is selected.

As regards the information given to Phonetisaurus in the learning process, we have carried out two experiments: word/word and word/morpheme-sequence. In the first experiment, the tool has been provided with all the word pairs to learn in each part of the corpus. For example:

b e k h a t u r i k → b e k a t u r i k

In the second experiment a different dictionary has been provided: the morphological analysis of the standard word instead of providing the word itself:

b e k h a t u r i k → b e k a t u + r i k

Results

The results obtained using the WFST approach are really good. Around 84% performance rate is obtained in both experiments on the test corpus (Table 1). We use the most common measures for the quality of the results in experiments with IR methods: precision, recall and F-score. These results confirm previous figures obtained using Cross-Validation on the learning corpus. Giving morpheme sequence information obtains slightly worse results but it offers directly the lemma/root of the word.

In the near future, our aim is to improve this using the additional morphological information that can be inferred from the whole corpora and the small annotated corpus.

	P	R	F-score
Word/word	91.53	78.27	84.38
Word/morpheme-sequence	91.08	77.56	83.78

Table 1 Precision, recall and F-score for the test corpora

Although our approach has to be tested with more texts and languages, we think that the results obtained can be interesting for this community because we have been working in a realistic scenario.

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Sporadic mutations in subject case marking: The complex history of oblique subjects in Icelandic

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In this this paper we focus on a rare type of morphosyntactic change in Icelandic, termed Impersonalization, which involves the emergence of new oblique subjects with verbs previously taking the otherwise expected nominative subjects. This change is contrasted with two other more widely attested changes, Nominative Substitution and "Dative Sickness" (Svavarsdóttir 1980, Eythórsson 2002, Barðdal 2011; for a summary, see Thráinsson 2007). It is shown that all of these changes are conditioned by lexical semantics of verbs and their outcome is a generalization of an unmarked (default) subject case (cf. Sigurðsson 2003 and much subsequent work). It is concluded that while many verbs taking oblique subjects are Old Germanic heritage (*þyrsta* 'thirst', *hungra* 'hunger'…), others have been formed at various points in the history of Icelandic.

Impersonalization can be regarded as an instance of "sporadic mutation", as it only affects a handful of experiencer verbs, including *hlakka til* 'look forward to' and *kvíða fyrir* 'be anxious about'. An example is given in (1), where (1b-c) have developed from (1a).

(1) a. *Ég hlakka til jóla*
I.NOM look forward to Christmas
b. *Mig hlakkar til jóla*
me.ACC looks forward to Christmas
c. *Mér hlakkar til jóla*
me.DAT looks forward to Christmas
'I look forward to Christmas'

By observing their etymologies, it can be shown that the verbs under discussion have undergone a semantic shift and a reanalysis of an agentive verb (e.g. *hlakka* 'cry (of birds)', *hlakka yfir* 'gloat over') as an experiencer verb (*hlakka til* 'look forward to'). The emergence of an oblique subject with these verbs is due to overgeneralization, although it is only sporadic, of the pattern of oblique subjects with experiencer verbs.

Impersonalization thus runs counter to Nominative Substitution, by which an oblique subject case (2a) is replaced by nominative (2b), syntactically the unmarked case in Icelandic par excellence; by contrast, the distribution of oblique case with subjects is more restricted and hence marked.

(2) a. *Bátinn rak að landi*
boat.ACC drifted to land
b. *Báturinn rak að landi*
boat.NOM drifted to land
'The boat drifted towards land'

"Dative Sickness", on the other hand, replaces a marked ("idiosyncratic") oblique subject case (accusative (3a)) by an unmarked (regular or "thematic") oblique subject case (dative (3b)). The effect of this change is regularization of the distribution of oblique subjects. Although all forms mentioned in (1)-(3) coexist in Modern Icelandic, the oldest variant of each example, (1a), (2a) and (3a), is considered more socially prestigious.

(3) a. *Mig langar í nammi*
me.ACC longs for candy
b. *Mér langar í nammi*
me.DAT longs for candy
'I want candy'

In Modern Icelandic Nominative Substitution and "Dative Sickness" are both subject to specific lexical-semantic conditions, in that the former almost only affects oblique theme subjects and not experiencers, whereas the latter exclusively involves experiencers and not themes (Jónsson 1997-98). Thus, the domains within which the changes operate are rigidly demarcated by lexical semantics.

On the basis of Nominative Substitution and Dative Sickness, among other facts about the Icelandic case system, we adopt the assumption (Sigurðsson 2003 and others) that (i) nominative is

syntactically the "maximally unmarked case" in Icelandic vis-à-vis oblique case and (ii) dative case is unmarked vis-à-vis the marked accusative case with oblique subjects of experiencer verbs. Given our analysis of the morphosyntactic changes in Icelandic, we propose the following Case Directionality Hypothesis:

(4) Case Directionality Hypothesis (CDH)
marked case -> unmarked case

An important aspect of the CDH is its predictive power: the identifiable – but complementarily distributed – lexical-semantic conditions on Nominative Substitution and Dative Sickness enable us to predict the directionality of these changes.

Impersonalization would seem to involve a change in the opposite direction to the one predicted by the CDH, in which the unmarked nominative case is replaced by a marked oblique (accusative or dative) case. Just like the other two changes, however, Impersonalization is also conditioned by lexical-semantics, following a semantic shift and reanalysis of an agentive verb as an experiencer verb. Although this change is only sporadic, it can be explained and predicted up to a certain extent. Therefore, we propose that Impersonalization can be subsumed under the CDH since oblique case is unmarked within certain semantically defined subclasses of experiencer verbs (Jónsson 2003), although of course it is marked vis-à-vis the vast number of verbs taking nominative subject. Consequently, all three changes have in common that a marked pattern yields to an unmarked one.

To conclude: While many verbs taking oblique subjects are Old Germanic heritage, others have been formed at different points in the history of Icelandic, a development that can still be detected today. Both Nominative Substitution and "Dative Sickness" involve a directionality of morphosyntactic change captured by the CDH; moreover, we argue that this is also true of Impersonalization, even though it appears to run in the opposite direction. All three types of change are semantically conditioned; Nominative Substitution affects (mostly) oblique theme subjects, "Dative Sickness" and Impersonalization only affect subjects of experiencer verbs. These findings reinforce the view that oblique subjects are productive in Icelandic, not just a fossilized remnant from an archaic stage. Thus, Impersonalization provides us with a rare opportunity to observe the emergence and development of oblique subjects in action.

The development of preposition stranding in Scandinavian and English

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A stranded preposition is a preposition not immediately followed by its complement. This is the result of a more general movement operation (internal merge, copying) which also affects and targets phrases other than complements of a preposition: A'-movement such as Wh-movement (1a), and topicalization (1b), or A-movement, such as passive (1c). In a wider sense, a preposition may be

stranded if the complement is represented by an empty element controlled by a higher phrase: in complementizer relatives (2a), infinitival relatives (2b), and as parasitic gaps (2c).

(1) b. What$_i$ did you talk about t_i?
a. [That issue]$_i$ we never talked about t_i
c. [That issue]$_i$ was talked about t_i for a long time
(2) a. [the issue]$_i$ (that) he talked about e_i
b. We have [an important issue]$_i$ to talk about e_i
c. [That topic]$_i$ we left t_i without having talked about e_i

A related type is found in connection with *sluicing* (Ross 1969, Merchant 2001), where a preposition may be stranded and then deleted along with the rest if the IP.

(3) Anne was waiting for someone, but I don't know who [~~she was waiting for~~].

The constructions in (1), (2) and (3) are all current as a regular pattern in English (starting with Middle English) and in Mainland Scandinavian, while they are impossible in the other Germanic languages. Outside of Germanic, a few marginal cases may be found in French, and in a much more restricted way an equivalent phenomenon can be observed in Hungarian and in Zoque (Mesoamerica).

In this talk, I will discuss preposition stranding from two different perspectives. In a diachronic perspective, I will be looking for the historical roots of the constructions which can be found in Old Scandinavian. As shown by Emonds & Faarlund 2014, there are both external historical reasons and internal morphosyntactic reasons for considering Middle and Modern English as North Germanic, more closely related to Scandinavian than to German and Dutch.

In the perspective of language classification and genetic relationship, I will identify other syntactic features shared by the two languages with preposition stranding, but absent in other Germanic languages. Such features include particle shift (4) and split infinitive (5), which are also unique to Mainland Scandinavian and English among the Germanic languages.

(4) She has thrown away the book
(5) We told him to not come back

The constructions in (4) and (5) may in some way turn out to be structurally related to preposition stranding in that they seem to indicate a certain tendency towards short dependency relations. By that I mean the possibility of severing complements from their heads in ways typical to English and Mainland Scandinavian, but not shared by other Germanic languages.

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On Italian -ata action nouns. A diachronic account

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The issue of the rise of *-ata* action nouns, which are widespread in the Romance languages but unknown to Latin, has been intensively discussed. Two major hypothesis have been put forward to account for the emergence of this derivational pattern: according to Diez (1871: 356-361), Meyer-Lübke (1890: 285-287, 1895: 574-575), Rohlfs (1969: § 1129) and Tekavčić (1972: § 1452), *-ata* action nouns are participial nouns, obtained thorugh the ellipsis of a feminine, singular lexical head; on the other side, following Collin (1904, 1918: 19-53) and Georges (1968) e (1970), *-ata* forms must be rather traced back to Latin *-tus* (<*-*tu*-) action nouns, belonging to the fourth declension, through their neuter-*tum* allomorphs.

I aim to provide new evidence in support of the latter position. In particular, I would like to show that the emergence of *-ata* nouns, both in Italian and in other Western Romance languages, is due to an overall reshaping of the nominalizing strategies in Late Latin, and seems to be connected to the loss of ground of the *-tus* (<*-*tu*-) suffix, originally devoted to nominalize stative and achievement predicates, but gradually dismissed since homophonic with the past participle *-tus* (<*-*to*-) ending.

Specific Latin contexts will be presented which might have licensed the reanalysis of the plural forms of the *-tum* allomorphs into a singular, feminine lexeme.

Beyond their etymological source, *-ata* nouns will be investigated with regard to their functional role in the domain of Romance nominalizations. Data from Latin and Old Italian show that *–ata* derivatives perfectly cover the semantic area nominalized by *-tus* (<*-*tu*-) action nouns, i.e. the class of unaccusative predicates. The question of the relationship of *-ata* nouns with other nominalizing strategies will also be addressed, especially from the point of view of the interplay of the *Aktionsart* of the predicate and the semantic value of the resulting action noun (along the lines of Gaeta 2002), in order to provide a consistent picture of a morpholexical diachronic change. Finally, the apparently unexplained exception of Roumanian, which lacks *-ata* nominalizations, will be discussed.

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Clitic placement and V2 – two sides of the same coin

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GOAL: The goal of this paper is to provide a uniform analysis of two previously unrelated phenomena in the generative tradition, namely V2 in Germanic and enclisis in Western Iberian Romance languages. We argue, building on Roberts (2012), that these pervasive and persistent syntactic properties can be accounted for uniformly assuming that Finº is a phase-head that parametrically bears distinct types of features. We contend that Finº bearing [+D, +V] and [EF] – i.e.,

an "edge feature," accounts for Germanic V2, with enclisis in Western Iberian arising as a result of Finº instantiating exclusively [EF]. Our proposal accounts uniformly for these two phenomena and opens a new venue to account for the presence and loss of these structures in previous stages of Romance languages that no longer exhibit these constructions.

BACKGROUND ON HISTORICAL V2 AND ENCLISIS: V2 (1) and enclisis (2) are attested in previous stages of Romance that no longer exhibit these syntactic structures.

1) De ceste novele ot Galaaz grant joie
of this news had$_{3SG}$ Galahad great joy
"Galahad took great pleasure in this news." [Old French]

2) Tomo**l** consigo por compannero [*Lo tomo]
took$_{3SG}$-him$_{CL}$ with-him for companion
"He took him with him as his companion." [Old Spanish]

MODERN V2 AND ENCLISIS: Modern Germanic languages (3) and Western Iberian (Asturian, Galician and European Portuguese) (4) still exhibit V2 and enclisis features respectively.

3) *Modern Scandinavian (Norwegian)*	4)) *Modern Asturian*
a). Det regner i dag. it rains in day "It's raining today."	a). Téo**les** tayaes. [***Les** teo] have$_{1SG}$-them$_{CL}$ cut "I have them cut."
b). I dag regner det. [*I dag det regner] in day rains it "It's raining today."	b). Cómo **t**'atreves? [*Cómo atréves**te**] how refl$_{CL}$-dare$_{3SG}$ "How dare you?"

The predominant analysis for V2 in Germanic is that it involves V movement to a head in the left periphery (den Besten 1983, Schwarz & Vikner 1996, Holmberg to appear) followed by the obligatory movement of a +D element to its specifier position. Enclisis is traditionally analyzed as a phonological phenomenon (see Rivero 1986, Fontana 1993, Barbosa 1995, 2000): Clitics require a phonological host to their left, in the absence of which last-resort verb-movement is triggered and enclisis obtains. According to these proposals, the phonological enclitic property of clitics is lost in modern stages of these languages, which explains the generalized proclisis. However, this analysis predicts incorrectly the unavailability of enclisis in subordinate contexts, a syntactic construction attested in Asturian, as we show below.

OUR ANALYSIS: Assuming a Cº-decomposition in 5)) along the lines of Rizzi (1997), we argue that Finº is responsible for both V2 and enclisis in Germanic and Romance languages as in 6).

5) [$_{ForceP}$ Forceº [$_{TopicP}$ Topicº [$_{FocusP}$ Focusº [$_{FinitenessP}$ Finitenessº [$_{TP}$ …]]]]]

6) Feature composition of Finº

a). Finº [+D, +V, EF] (Germanic)	b). Finº [EF] (Western Iberian Romance)

The feature composition of Finº in Germanic languages in (6a) requires that both a nominal and a verbal element target that projection, movements that in turn trivially satisfy the [EF] we propose. Enclisis/proclisis in Western Iberian arises as a result of (6b), with [EF] requiring the displacement of an element to Finº, satisfied either by an element undergoing A'-movement to the left-periphery of the clause or by last-resort movement of the closest head to Finº.

7) V2 – cf. (3): [$_{FinP}$ Fin^{o} [+D, +V, EF] [$_{TP}$]]]

8) Enclisis/proclisis alternations – cf. (4):

a). Enclisis: [$_{FinP}$ Fin$^{o}_{[EF]}$ [$_{TP}$ **les** teo]] > [$_{FinP}$ [téo**les** Fin^{o} $_{[EF]}$ [$_{TP}$ ~~les teo~~]]]

b). Proclisis: [$_{FinP}$ Fin$^{o}_{[EF]}$ [$_{TP}$ **te** atreves cómo]] > [$_{FinP}$ cómo [Fin^{o} $_{[EF]}$ [$_{TP}$ te atreves ~~cómo~~]]]

We will further argue that Fin^{o} in Old Romance (OR) had both [+D] and [+V] in addition to [EF], but that the majority of the OR languages lost these in the transition into the modern languages. Western Iberian languages, however, retained the [EF] feature, which explains the enclitic/proclitic patterns we still find in this group of languages.

FURTHER EVIDENCE. V2 and enclisis also attested in subordinate environments (see Julien 2007, 2009, Truckenbrodt 2006 for Germanic; and Fernández-Rubiera 2009, and Viejo 2009 for Asturian, and Salvesen & Walkden (ms) for a comparison of Old English and Old French). Phonological approaches fail to account for the availability of enclisis in this environment: the complementizer may act as a host and this explains the proclitic pattern, but the attested enclitic pattern is incorrectly ruled out and unaccounted for.

9) Han sa at i dag regner det. [at det regner i dag] [Norwegian]
he said that in day rains it
"He said that it is raining today."

10) Digo qu'ayúda**me** [que **me** ayuda] [Asturian]
say$_{1SG}$ that-help$_{3SG\text{-}IND}$-me$_{CL}$
"I say that s/he helps me."

Our proposal also accounts for these data uniformly: If complementizers may instantiate different heads in the left-periphery (see Demonte and Fernández Soriano 2009 for Spanish, Ledgeway 2005, 2012 for Old Romance, Salvesen 2014 for French), a complementizer in Fin^{o} licenses this phase-head's features and blocks further operations triggering V2 and enclisis. In turn, a complementizer in Force^{o} does not license the features of Fin^{o} and consequently, the same operations that give rise to V2 and enclisis/proclisis alternations are triggered.

HISTORICAL DATA. Our proposal opens a new line of inquiry. We hypothesize that the features attributed to Fin^{o} as a phase-head had suffered from erosion and are no longer attested in those modern languages that no longer exhibit V2 or enclisis.

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Exceptional past and participle forms of *j*-present weak verbs in West Germanic: A reassessment of the Old High German evidence

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In the older West Germanic languages, there are a number of *j*-present (Class 1) weak verbs that are more-or-less consistent exceptions to the general rule that short-stem verbs have a syllabic *-i-* (Old English *-e-*) before the past/participle suffix, as in OE *fremede* (3s); *(ge)fremed* (ptc.) 'perform', and that long-stem verbs – though they lost the medial *-i-* in the finite past and inflected participle forms to prosodically conditioned syncope – still retain the *-i-* (*-e-*) in the uninflected participle, with *i*-umlaut in Old English providing clear evidence of its earlier presence in other forms as well (e.g. OE *dēmde* (3s); *(ge)dēmed* (ptc.) 'judge'). The comparative evidence from Gothic and Old Norse makes it clear that a handful of verbs – the ancestors of English *bring–brought*, *think–thought*, *work–wrought*, and a couple of others – already lacked the *-i-* in proto-Germanic, but especially in Old English there are

considerably more verbs – about two dozen in all – that follow this minority pattern. Old Saxon and Old Frisian show at least some similar forms.

In this talk, I focus primarily on the subset of these verbs with root-final *-k*. In Old English, these verbs have *h* (voiceless velar fricative) in place of *k* in the past and participle, just like the common Germanic cases mentioned above (*think–thought*, etc.). Although many of the corresponding Old High German forms also have *-h* (and no *-i-*), these forms have long been treated as unexceptional. Intervocalic *-k-* regularly becomes a geminate fricative, *-hh-*, in the High German consonant shift. This geminate fricative would make the stem long, thus triggering syncope of *-i-*, even in original short stems. Thus, an Old High German form such as *(umbi)tháhta* '(he) covered (all around)' can be derived by regular sound change from pre-OHG **þakida*, and the striking similarity to the cognate Old English form *ðeahte* is regarded as purely coincidental.

Ringe has recently argued strongly in favor of this traditional explanation for the Old High German forms (Ringe and Taylor 2014; see also Kiparsky 2009), emphasizing in particular the fact that the uninflected participles of such verbs in Old High German – unlike Old English and unlike the small *think–thought* group in OHG itself – consistently have *-i-* and umlaut of the root vowel.

Through a careful quantitative analysis of the available evidence using the electronic *Referenzkorpus Altdeutsch*, which is now accessible through Annis (https://korpling.german.hu-berlin.de/annis3/ddd), along with a new associated database of about 160,000 words of Old High German with segment-by-segment morphophonological annotation, I show that the case for the traditional account is actually quite weak and argue that the effect of the High German consonant shift on these paradigms was essentially to make the irregular past forms look regular, leading to further regularization elsewhere in the paradigm. Thus, the Old English forms of these verbs probably do reflect (at least) a common West Germanic development.

I conclude with some thoughts on broader questions concerning the development of the *j*-present weak verbs in Germanic and some possible implications of the West Germanic evidence for the puzzle of the umlautless past forms of the short-stem *j*-present weak verbs in Old Norse.

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Explaining the 'Give' – 'Take' Alternation in the Indo-European Languages

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The difference in meaning between the reflexes of the PIE root **deh*$_3$- 'to give', such as e.g. Greek *dídōmi*, Latin *dāre*, Armenian *tam*, which all mean 'to give', and its Anatolian cognates, Hittite *dā-*^{zi} / *d-*, Cuneiform Luwian *la-* (besides *ta-*, *da-*), Hieroglyphic Luwian *ta-*, which all mean 'to take', has been a longstanding puzzle in Hittite and IE linguistics. Since Anatolian is the only branch that exhibits the meaning 'to take' for this verbal root, as opposed to all the other IE languages, which show the meaning 'to give', it naturally follows to posit an original meaning 'to give' for **deh*$_3$- (leaving aside, for the moment, the vexing problem of the so-called *Indo-Hittite Hypothesis*, which reckons with an earlier departure of the Anatolian branch from the rest of Proto-Indo-European).

Several attempts have been made at explaining this problem. Some scholars have assumed different original proto-semantics for **deh*$_3$-, which then split into either 'to give' or 'to take'; cf. e.g. HOUSHOLER-NAGY (1972: 774) ('seize, in order to engage in a social transaction'), BADER (1988: 64) ('échanger'); GÖTZE-PEDERSEN (1934: 68) (originally verb of motion without possessive notion). Other scholars have mentioned in passing the, perhaps spontaneous, shift of directionality found in etyma with meanings like 'to give' or 'to take'; cf. e.g. KRONASSER (1956: 156, 1960: 24) (Greek *p*^{h}*érō* 'carry' ~ 'bring here'; Greek *némō* 'assign to' ~ Old High German *neman* 'take'; Old Irish *gaibim* 'take' ~ Old High German *geban* 'give'; Greek *aínymi* 'take' ~ Tocharian B *ai-tsi* 'give'). Neither of these approaches is particularly likely, however, and the assumption of a different proto-meaning is a mere apodictic compromise. Simply hinting at similar changes in meaning with other verbal roots does not substitute an analysis properly argumented for, especially since these potential parallel developments have not been properly explained either. At best, these potential parallels show we have to reckon with a particular mechanism that made such semantic deviations possible.

Another, and more substantial, hypothesis, which can be called the *preverb hypothesis*, takes as a starting point a compound verb such as Sanskrit *ā-da-* 'to give to one's self' (cf. STURTEVANT [1933: 79], EICHNER [1975: 93s.]).

In contrast to these, another potential mechanism shall be suggested in the present paper, involving an oblique subject construction. In the following Icelandic "anticausative" example the first argument is an oblique subject in the dative case. It is the receiver of the verbal action expressed by the verb *gefa* 'to give'. The object is the accusative *goðan byr* 'good wind', while the nominative is not a part of the event structure, due to the spontaneous nature of the event:

(1)	*þeim*	*gaf*	*goðan*	*byr*
	they.DAT	give.3SG.PRT	good.ACC	wind.ACC
	'they received good wind'			

It is, moreover, a well-known phenomenon that dative subjects tend to change into nominative, the default and the most common subject case.. Such a change has been called *nominative sickness* (cf. EYTHÓRSSON 2000, 2002, BARÐDAL & EYTHÓRSSON 2003) and concomitant with this change, a higher degree of control may be exerted by the subject referent. Consider, for instance, the following Modern Norwegian and English examples:

(2)	*det synes meg*	→	*jeg synes*
	'it appears to me'		'I find / consider …'
(3)	*it pleases him*	→	*he does as he pleases*

In such a scenerio, a predicate like ‘to give’ would first change its meaning to ‘receive’ through the reduction in valency as in (1) above, and then through the change DAT → NOM to ‘take’, with the nominative yielding a higher degree of control.

It will be argued here that a similar syntactic change took place in the prehistory of Anatolian: Starting with a reduction in valency from a three-place predicate to a two place predicate with an oblique subject, this oblique subject construction later developed into a NOM-ACC construction with agreement on the verb. In the course of this syntactic development the descendent of the verbal root **deh$_3$-* ‘to give’ would assume the meaning ‘to (actively) take’ as seen in Hittite *dā-^{zi} / d-* ‘to take’.

The case of Hittite *dā-^{zi} / d-* ‘to take’ vis-à-vis Latin *dāre* ‘to give’ etc. is just one instance of the puzzling semantic change in such verbs. The above-presented mechanism may also accounts for other such cases (see the list of verbs given by KRONASSER *l.c.*: Greek *némō* ‘assign to’ ~ Old High German *neman* ‘take’; Old Irish *gaibim* ‘take’ ~ Old High German *geban* ‘give’). Such an analysis would also enable us to uphold the etymological connection of Latin *habēre* ‘to have’ with the PIE verbal root **g^{h}eb^h-* ‘to give’ (also found in the dative subject construction in the Icelandic example in 1 above), although this etymological connection has been repeatedly called into question. The difference in actionality between Latin *habēre* (stative) and the expected dynamic semantics of ‘to receive, to take’ may simply be due to its overt stative morphology involving the stative suffix *-ē-* < PIE **-eh$_1$-* (*habēre* < **g^{h}əb^h-eh$_1$-*)

The analysis suggested here, which takes as its starting point a dative subject construction and envisages a syntactic and semantic re-interpretation of the first argument and the predicate, neatly explains the hitherto problematic alternation in meaning of verbs like ‘to give’ ~ ‘to take’. It involves only well-documented linguistic processes and is therefore superior to earlier explanations which have to assume either undocumented proto-meanings or spontaneous, unexplained semantic changes.

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Anti-relevant, contra-iconic but system-adequate: on unexpected inflectional changes

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In order to account for the fact that "morphological change proceeds through stages of ordered variation" (Andersen 2010: 118), several universal principles have been suggested that are supposed to limit the possible shape of inflectional systems. The principle of relevance (Bybee 1985, Carstairs-McCarthy 2001) strongly limits the variation tolerated by the affix ordering because it maintains that the linearization of inflectional markers follow a semantically-driven path going from more to less relevant with regard to the lexical meaning of the base verb. This has far-reaching consequences of a theoretical nature because it predicts that inherent inflection will occur inside of contextual inflection (cf. Booij 1996), and of typological nature inasmuch as it accounts for Greenberg's Universal #28. Accordingly, morphological change is expected to be directed towards reducing deviating cases (e.g., via externalization of inflection, Haspelmath 1993). Furthermore, the principle of constructional (or diagrammatic) iconicity (cf. Mayerthaler 1981, Dressler 2003) assumes that subtractive marking, in which the derived form is less overtly marked than its base, is contra-iconic and therefore expected to occur seldom, usually as a recessive feature, and predictably eliminated. In this regard, the often quoted case from a Franconian dialect in which a subtractive plural occurs (*hond* / *hon* 'dog(s)') "has become unproductive and loses items to diagrammatic additive plural formation" (Dressler 2003: 464).

The paper presents two case-studies which clearly falsify the expectations arising from these principles and cry for an explanation. As for relevance, in the dialect of Groningen (Reker 1988), the number / person markers occur closer to the stem than tense markers: *bak-s-te* 'bake-2SG-PAST' / *bak-ng-de* 'bake-PL-PAST', and this anti-relevant order is extended to cases involving clitics as in the Zuid-Holland form *hoor-ik-te* 'hear-I-PAST'. With regard to diagrammatic iconicity, in the dialect of Milan (Salvioni 1975), the contra-iconic plural marking displayed by the feminine *a*-class occurring in *scarpa* / *scarp* 'shoe(s)' is extended to cases formerly displaying a zero plural: $^{+}$*carn* / *carn* 'meat(s)' > *carna* / *carn*.

The rationale underlying both cases has to be sought in a conflict between general principles limiting the universal degree of variation tolerated by inflectional systems and what Wurzel (1984) has called system adequacy, namely the tendency of an inflectional system of developing its own internal consistency by increasing the strength of its system-defining structural properties (e.g., via the extra-morphological motivation of inflectional classes). The effect of system adequacy results into a more economic, i.e. less costly, representation of morphological information, at the expenses of the violation of universal principles involved by anti-relevant and contra-iconic coding strategies. However, it remains to be understood how far the friction between universal and system-specific complexity can go especially with regard to the quest for universal principles accounting for the possible variation tolerated by inflectional systems.

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Towards a pragmatic account of the particle persino/perfino in Italian: steps of a grammaticalization process

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In this paper, the diachronic steps towards the grammaticalization of the Italian Focus-sensitive particle *persino/perfino* are tackled (Heine et al. 1991; Lehmann 1995; Hopper &Traugott 2003 among others).

The form *persino/perfino* harkens back to the Latin noun *finis* ("limit", "boundary") basically encoding a spatial meaning (Lehmann 1985; Svorou 2002; Fagard 2011). In addition, when marked with an ablative case, *finis* could also take on relational values (typically, a prepositional function), as illustrated in (1)

(1) *per* *mare* *umbilici* **fine** *ingressi*
across sea.SG.ACC navel.SG.ABLlimit.SG.ABL drench.PST.PART.PL.NOM
terram *petebant*
land.SG.ACC reach.IMPF.3.PL
"They reached the land drenched in water up to the navel"(*Bellum Africum*; 85.1.)

It must be highlighted, however, that such relational uses were not very diffuse in Latin, as also demonstrated by our corpus analysis.

By the 15° century, *fino* made its way into an initial stage of grammaticalization, developing a temporal nuance, coming alongside the original spatial semantics. This innovation came about through a reanalysis of the concept of "limit", shifting from a delimitation of a specific point in space to the signaling of a given moment in time in which something begins or ends (Haspelmath 1997; Heine & Kuteva 2007). Co-occurrence of *per* and *fino* in the same syntagmatic environment was very frequent, as *per* was often resorted to strengthen the meaning of *fino*. As a result, the two forms conflated in a single lexical unit acquiring a novel, almost fully-fledged, adverbial function. An example is given in (2)

(2) *E li miracoli di questa Fede e Legge s' incominciarono*
And the miracles ofthis Faith and Law begin.PST
perfino *da Abele*
since Abel
"And the miracles of this Faith and Law begun since Abel" (Genesis; 1. 6.33)

Written texts dated back to the mid-15° century reveal that the new adverb *perfino*, together with its interchangeable variant *persino*, was being used with added abstract values bearing upon micro-pragmatic constraints. Precisely, the earlier spatio-temporal semantics seemed to have given way to a focalizing function, which we see already instantiated in examples like the following, taken from Leon Battista Alberti (1433-1434):

(3) *a me certo parrebbe cosa piissima esterminare e spegnere*
to me well seem thing rightest to exterminate and to kill
i ladroni **persino** *col sangue mio*
the thieves even with blood my.
"well, it seems to me that exterminating and killing the thieves, even with my blood, would be the rightest thing" (*I libri della Famiglia*; 81)

As can be observed, here *persino* induces a focal interpretation of the NP *col sangue mio*, and no spatio-temporal value seems to be recoverable in this use.

Needless to say, occurrences of *persino/perfino* as focus-sensitive particle are extensively attested in contemporary Italian, and are generally found in examples like (4):

(4) **Persino** *Mario mi ha detto che ti sei sposata!*
Even Mario has told me that you got married!

For the purpose of the present discussion, we have gathered data from corpora of written Latin and Old Italian texts. Based on the evidence so far available, we will seek to explicate the stages underpinning the grammaticalization pathway of *persino/perfino* with the view to recasting its present-day function as the by-product of a gradual process of categorical re-functionalization (Bybee et al. 1994; Traugott& Trousdale 2010).

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Could Greek and Italic share a same Indo-European substratum?

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Greek and Latin have developed from their common Proto-Indo-European (PIE) ancestor in distinct ways, resulting in two languages that exhibit very different features. Different phonetic, morphological and lexical innovations have led to two vastly divergent systems, in particular regarding phonology and *Wortbildung*. Moreover, the Greek lexicon has been long recognized for its huge proportion of non-inherited words, among which it is difficult to draw a clear distinction between substrata and loanwords. Several of the languages that contributed to shaping the Greek lexicon are Indo-European, be they Anatolian or not. Among the Indo-European contributors to the non-inherited

Greek lexicon, we tentatively identify a language that shares phonetic and morphological features with substratic elements attested in Italic, and possibly articulatory properties of Latin itself. We shall review five of these features: (i) voiceless reflexes of PIE voiced aspirated stops; (ii) the metathesis of nasals resembling the *lex-unda* in Latin but generalized to labial stops; (iii) a velarized /ɬ/ (viz. *l pinguis*) which can trigger an anaptyctic *-ŏ-* or *-ŭ-*; (iv) the frequent use of an elsewhere poorly attested labial morph; (v) apparent voice alternations that follow similar patterns to the Verner law in Germanic.

The connection between non-inherited Lat. *rŭtĭlus* 'red' and the ethonym *Rŭtŭlī* 'Rutulians' is consensual, as is their derivation from PIE **h₁rud^h-ró* > Com. It. **rŭtəló-* (Szemerényi, 1991:670). Inherited counterparts are Lat. *rŭběr* 'red' (< Com. It. **ruϑró-*) and Gr. ἐρυθρός 'red'. The non-inherited correspondance PIE *d^h* ~ Lat./Gr. *t* is also found in Gr. Αἴτνᾱ (borrowed as Lat. *Ætna*) 'Etna' < PIE **h₂éyd^h-n-eh₂* f. 'furnace', derived from **h₂éyd^h-ō^n* 'burning' (Szemerényi, 1991:666-668). This *lex-Ætna* explains *Tĭbĕris, -is* m. 'the river Tiber' < Com. It. **Tŭbris* < PIE **d^{h}ub-rí-* 'ravine' (Szemerényi, 1991:675-681). It also applies to *b^h* as shown by Lat. *Alpēs, -ium* f. pl. 'the Alps' < Com. It. **Alpéy-es* < PIE **h₁alb^h-í-* f. 'white color, whiteness', i.e. *Alpēs* 'the white mountains', as already suggested by Szemerényi (1991:673-674).

Another example of PIE *b^h* ~ Lat./Gr. *p* is provided by the initial stop in Gr. πύνδᾰξ m. 'bottom of a jar' reflecting **pundó-* 'bottom' < PIE **b^{h}ud^h-nó-* 'bottom'. More interestingly, this word is the result of a treatment akin to the *lex-unda* in Latin (Meiser, 1998: 121), i.e. **-T-n-* > Lat. *-nd-* (with voicing; T = **t*, **d* or **d^h*). The inherited Latin reflex of PIE **b^{h}ud^h-nó-*, namely *fundus* 'bottom', provides a parallel for a derivation of the form PIE **b^{h}ud^h-nó-* > **put-nó-* (*lex-Ætna*) > **pud-nó-* > **pundó-*, hence πύνδᾰξ. Although the *lex-unda* in Latin is restricted to dental stops, it seemingly extends to labial stops in the non-inherited Greek word στρόμβος 'top' (Ξ 413) or 'whirlwind', which we relate to στρέφω 'to twist' ("Pre-Greek" according to Beekes, 2014:156). We start from PIE **trep-* 'to turn' with a spurious **s-* (maybe from a fossilized preverb or an elsewhere unattested *s mobile*; compare inherited τρέπω 'to turn'), hence a verb **strép-e/o-* (> Gr. στρέφω[8]) and a noun **stróp-no-* > **strób-no-* (type τόρνος; with voicing[9]) > **strómbo-* (> Gr. στρόμβος).[10]

Several non-inherited Greek words seem to contain anaptyctic vowels *-o-* and/or *-u-*, especially next to an *l*. One way to explain this is to postulate a velarized articulation /ɬ/ in the corresponding contexts, for instance when the *l* is the first consonant in a consonant cluster.[11] Let us start with σκόλοψ m. 'pointed pole, palisade, prickle' < **skółəp-* < **skółp-* < PIE **(s)kól-P-* < **(s)kól(h₂)-p-* (with 'Saussure-effect') from a PIE root **(s)kelh₂* 'to chop (wood)' and with the labial morph, which is

[8] The rendering of the substratic **p, *k, *t* as the aspirated stops φ, χ, θ is a frequent phenomenon according to Beekes (2014:14).

[9] Another possible example of this treatment of labial stops *à la lex-unda* is the toponym Ὄλυμπος (var. Ὕλυμπος) 'Mount Olympus', which we believe should be derived from PIE **h₁alb^h-i-nó-* > **alpnó-* > **alnpó-* > **alənpó-* 'white' hence *ὀλυμπός 'the white mountain', a widespread way to denote snowy mountains. See below for explanations on the /ɬ/ and its consequences. The difficulty with this appealing etymology is that we could expect the *p* (< PIE **b^h* as per *lex-Ætna*) to become voiced as the result of the metathesis, as in πύνδᾰξ and στρόμβος. An explanation for the attested *-mp-* could lie in the consonant cluster resulting from the syncope if the unaccented *-i-*, and the resulting syllabification: PIE **h₁alb^h-i-nó-* > **alp.nó-* > **aln.pó-* > **ələnpó-* > *ὀλυμπός. The sequence *-lpn-* seems to provide an environment that blocks the voicing of the *-p-*.

[10] This *lex-unda*-like system is more economical than Beekes' Pre-Greek prenasalized consonants.

[11] This is reminiscent of Latin phonetic features, especially in vulgar variants of South Italy.

poorly attested but not unknown in Indo-European languages. Σκόλοψ can be related to the Hesichian glosses σκόλοφρον· θρανίον 'bench' and σκολύψαι· κολοῦσαι, κολοβῶσαι 'to cut short, mutilate' < **skółəp-* < **skółp-* (< PIE **(s)kól-P-*). Gr. κόλαφος m. 'buffet' (< **kółpo-* < **kółəpo-* < PIE **kól-P-o-* < **(s)kol(h₂)-P-o-*), Gr. κολάπτω 'to carve' and Lat. *scalpō* 'to carve' (also with the labial morph) certainly belong here, although the umlauting -α- is difficult to account for.[12]

Κολοβός 'mutilated' < **skołəbós* < **skołbós* < PIE **(s)kol-P-ó-* < **(s)kol(h₂)-p-ó-* is formally and semantically close to this series, although with two striking differences: the labial morph is voiced and the stress is word-final. This could be the outcome of a Verner-like treatment, also found in the verb κολούω (aor. κολοῦσαι) 'to curtail' < *κολόϝ-γω (aor. *κολόϝ-σαι) < **kołəw-s-* < **kołəƀ-s-*. The same effect is found in στραβός 'squinting' (< PIE **s-tṛp-ó-*) and στρεβλός 'turned, twisted' (< PIE **s-trep-ló-*) from PIE **trep-* 'to turn' (see above). Also Gr. καλύβη f. 'hut, cabin' (var. καλυβός, κολυβός m.), which is difficult to separate from PIE **ḱel-* 'to cover' (cf. Lat. *oc-cŭl-ĕrĕ* < PIE **ḱél-e/o-*), points to a substratic **kałəbó-* 'covering, shelter' < **kałbó-* < PIE **ḱl̥-P-ó-* 'covered' that exhibits this Verner-like effect. In addition, it shows that we are dealing with a *centum* language.

We have unveiled a consistent system of phonetic and morphological common points between one of the IE layers in the non-inherited Greek lexicon and substratic words and influences in Latin. On the Italic side, it corresponds to Szemerényi's Siculo-Ausonian substrate. On the Greek side, it is probably not Anatolian, nor can it be identified with the language that provided the word πύργος m. 'tower' (substantivization of a PIE adj. **bʰṛǵʰ-ó-* 'high'), as καλύβη points to a vocalization in *-aR-* (and not *-uR-*) of sonorant vowels.

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[12] Gr. κέλῡφος n. 'husk or skin of a fruit' and the most probably related καλύπτω 'to cover' (Beekes, 2010:670) constitute two other examples of this velarized *ł* (see also note 1) and of the labial morph. However, the long -ῡ- is unexpected. We could resort to a substrate word **kéłəwp-o-* deriving from **kéłʷəp-o-* < **kéłəp-o-* < **kélp-o-* < PIE **ḱél-P-o-*, with an *łʷ~łəw* that could echo Beekes' Pre-Greek *lʷ* (Beekes, 2010:xviii).

Semantic Universals: Some Denominations of 'Man' in Different Languages, from a Cognitive Perspective

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By choosing the notion of 'man' – as a central concept in human's thought – to be analysed, we aim to take a necessary step towards identifying the units of meaning that could be valid across time and space, and this identification is possible by taking hold of the manner in which man himself perceives his own human being. The archaeology of language offers the perspective over the primary concept (or, at least, the roots of the history of thought in this matter), and the study of the semantic changes allows us to understand the conceptual change. For a clearer perspective, without any interpretative or philosophical interpretation due to cultural dimensions, the only way to get the original human thought is the etymological analysis, the comparative and cognitive vision of the words referring to 'man' included in various languages, as old Indo-European idioms (Greek, Latin), modern ones (Romance languages, English, German), for which we propose a comparison with the Hungarian language, as being a non-Indo-European idiom. Choosing this lexical field is justified by the attempt to answer the questions related to the universality of the cognitive processes beyond spatial, temporal or linguistic criteria. Given that the only absolute constant in human mind is the self, one wonders to what extent do men perceive and express their own being in similar terms, and to what extent would the variety of the social, cultural and geographical environments determine a difference in the conceptualizations of the self and the others.

One difficult aspect of the topic is the etymology of these terms, as this area of linguistics has lately been more and more avoided by the researchers. Therefore, it is absolutely necessary to identify a semantic core, in order to allow comparisons with other languages and to facilitate broader assumptions on the typology of languages and idiomatic elements common to all. A cognitive perspective can facilitate the process of establishing some of the roots by integrating certain mental patterns whose existence has been demonstrated by clear etymologies.

What gives the present study an interesting and new approach is that this concept has both concrete and abstract sides: the man, on the one hand a concrete human being, identical in terms of constitution with other members of this class, and on the other hand an abstract, inner self, as opposed to his fellows' self.

By taking as a starting point the etymology and, at the same time, influencing on the etymological reinterpretation in cases of doubt or obscurity by establishing semantic parallels, the main directions of research could explain many aspects, among which we mention:

a. Demonstrating the etymology of Gr. ἄνθρωπος 'man' - ἀνήρ + ωπος ('with the aspect of a male') would imply the primacy of the opposition man / woman, rather than the original perception of man as a species and rather than a ternary conceptual structure (containing a generic term and two opposing gender specific terms), as generally accepted in linguistics. This finding would require the reconsideration of the relation between *homo-mulier* in Latin, which will lead to a reinterpretation of the relation *generic – masculine specific* in the Romance languages.

b. An onomasiological perspective can reveal various models of perceiving the man: for example, Gr. φως means 'man' and 'light' without being a case of homonymy, but a case of polysemy (Haudry, 2009); a close analysis of ancient Indo-European languages reveals a constant relation between man and light or fire, as life is equated with fire through a primary conceptual metaphor. The Latin word *homo* has been considered as related to *humus* 'earth', which might highlight an old concept, beyond mythology, which establishes a primary relation between man and earth (considering man either as 'the one made of earth', either as 'terrestrial', belonging to the land as opposed to the sky, the seat of divinity).

c. We consider significant the choice of Lat. *persona* as a generic term for 'man', which denoted originally the 'theatre mask', then the 'role'; to what extent is this semantic extension based on a real perception of the society as a theatre, to what extent does this metaphor apply to Latin and represent the starting point of the semantic evolution 'mask' → 'man'?

The etymological analysis tries to define the original core of meaning, through the identification of the Proto-Indo-European root; thus, through the removal of any supplementary semantic and cultural addition, we can accede to the manner of the initial capture of reality in the word. Establishing the Proto-Indo-European roots is possible only through the comparative-reconstructing grammar method: we can thus obtain information regarding the existence or, on the contrary, the absence of certain Indo-European specific designations. Such a study, implies a diachronic semantic analysis of the terms, which allows for the examination of their semantic route, the enrichment or the loss of the original meanings, their change being a reflection of the psycho-social transformation of the communities and of a certain change within the human capacity of abstracting. Closely connected to etymology, both consequence of the etymological approach and, in many cases, one of its precursory stages, we have the detection of the conceptual metaphors that underlie the creation of the terms from this field. The synthesizing of these data could throw a new light upon cognitive constants, polygenesis and semantic change.

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Diachronic word class universals

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We identify the variables that contribute to the diachronic change of word classes, describe their configuration in a large sample of empirical case studies, observe correlations between these variables and quantify the correlations in the form of implicational universals. In this work in process, we collect at least 150 cases of diachronic word class changes in languages worldwide which comprise but are not restricted to the following:

- Yokuts Pronouns (Gamble, 1988)
- Number systems in Amazonian languages (Epps, 2006)
- Singular/Plural classifiers in Kam [Tai-Kadai] (Gerner, 2006)
- Tense paradigm in Persian (Estaji & Bubenik, 2007)
- Non-past verb paradigm in Sunwar [Tibeto-Burman] (DeLancey 2011:346-349)
- Causative verbs in Tibeto-Burman (Gerner, 2007)
- Social Deixis classifiers in Ahmao [Miao-Yao] (Gerner, 2008, 2009, 2010)
- Nasal inchohative Verb Class in Northern Indo-European languages (Gorbachov, 2007)

(…)

We identify four variables that play a role in the diachronic change of word classes (Gerner, 2012):

(i) Quantificational: The number of new meanings acquired by the word class;
(ii) Preservative: The original members continue or cease existence;
(iii) Directional: The items undergo grammaticalization or lexicalization;
(iv) Temporal: The word class undergoes changes in one language (young process) or in a language family (old process).

Depending on how these variables are configured in the sample of 150 word class changes, we aim at quantifying the following implicational universals.

Universal #1: The greater the size of the target word class, the lower the number of new acquired meanings.

Universal #2: The greater the size of a word class, the more likely it is that any change it undergoes will be lexicalization.

Universal #3: In a typical process of grammaticalization comparatively more meanings are generated than in a typical process of lexicalization.

Universal #4: The grammaticalization of word classes is often a young process, whereas the lexicalization of word classes tends to be an old process.

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Self-Constructions in Russian: A Cultural-Historical Aspect

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Although in historical linguistics the major factors of language change are usually supposed to be intra-linguistic (e.g.,Bynon 1977; Jeffers & Lehist 1979; Hock 1986; Traugott & Trousdale 2013) or social (e.g., Labov 1972; Romaine 1982; Nevalainen & Raumolin-Brunberg 2003; Millar 2012), there is strong evidence that cultural factors up to ultimate cultural models may also have a significant impact on the process of language change. Thus, Glebkin (2013) addresses the machine metaphor

(world as machine, society as machine, body as machine, etc.) as a cultural-historical phenomenon, examining its development from Antiquity to Early Modernity. He reveals that the conceptual machine metaphor (machina mundi, machina rerum, etc.) appears in the Middle Ages, long before Newton and the Industrial Revolution, in the wake of the transformation of basic elements of the cultural model of the universe from Antiquity to the Middle Ages.

This research also investigates the influence of fundamental cultural models on the process of language change. Lakoff & Johnson (1999, 267–289) examine the Subject-Self conceptual metaphor, marking out different types of Self. In particular, they focus on the Social Self. For them, this can be revealed in constructions like *He's struggling with himself over whether to go into the church*; *I need to be a better friend to myself*, etc.

The present author tackles the problem of the emergence of Social-Self constructions in the Russian language. It is shown that such constructions as *говорить с самим собой* (speak to oneself), *обвинять себя* (blame oneself), *обманывать себя* (deceive oneself), etc., appear only at the beginning of 19th century, as a result of cultural requests connected with an emergence of the notion of a 'private person' characterized by deep self-analysis and introspection.

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Deponency as reanalysis: a diachronic account of voice mismatches

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Proposal I analyze deponents as the result of a diachronic reanalysis of a low benefac- tive argument as an agent. Since agent subjects are usually in complementary distribution with non-active voice morphology, the result of this diachronic development is a synchronic "mismatch" between argument structure/syntax and verbal morphology.

Background Deponents are verbs with non-active morphology, but active syntax that occur in a particular type of voice system in which the same voice morphology is used across different syntactic contexts: anticausative, reflexive, passive, etc. ("voice syncretism", Embick 2004). Representative cases are found in Sanskrit (Skt.), Latin (Lat.), Hittite (Hitt.), Ancient Greek (AG), and Modern Greek (MG), all of which have bivalent voice systems (active/non- active) with voice syncretism, e.g., Skt. tra¯´yate 'protects', Lat. hortor 'urge, exhort', Hitt. tuhšari 'cuts off', AG díz¯emai 'seek', MG metahirizome 'use', which are all morphologically no˘nactive. I have argued elsewhere that these verbs behave syntactically like agentive, transitive verbs: they have accusative direct objects, they make agent nouns, are compatible with agent-oriented adverbs, and can passivize under certain circumstances. There are also verbs that only take non-active morphology (media tantum), but do not have this argument structure, e.g., stative verbs like AG ke˜ımai 'lie', Skt. a¯´ste 'sits', unaccusative verbs like Lat. orior 'rise', and experiencer verbs like Lat. fruor 'enjoy' and MG fovame 'fear'. I do not treat these as instances of a syntax/morphology mismatch (following Kallulli 2013 and Zombolou and Alexiadou 2014) and focus on deponents with agent subjects.

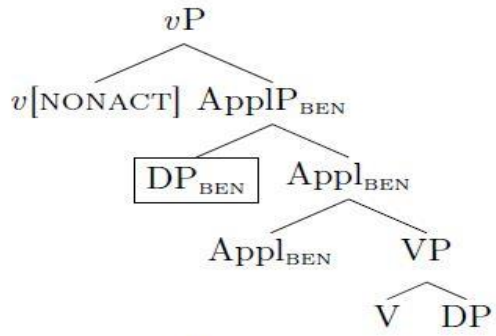
Analysis I adopt an approach to Greek-type voice morphology in which non-active marks the absence of an agent argument in the specifier of v (the event/agent-introducing projection), a type of unaccusative analysis based on Embick (2004: 150: "Non-active voice is assigned when v does not introduce an external argument", cp. also Embick 1998, Kallulli 2013). This leads to uniform voice morphology across different syntactic contexts (anticausatives, reflexives, psych verbs, stative verbs, etc.), all of which lack an agent in Spec.v P. Active morphology is treated as "elsewhere" and is spelled out when the condition on non-active morphology is not fulfilled because v does introduce an agent or when the v P is lacking entirely (as in certain unaccusative verbs, Alexiadou & Anagnostopoulou 2004). One core context for non-active morphology in Greek-type languages are self-benefactive constructions, e.g., AG phéromai 'I take for myself, win, carry off' (vs. active phér¯o 'carry'), Skt. yájate 'makes a sacrifice for his/her own benefit' (vs. active yájati 'sacrifices'), etc. I follow Pylkkänen (2008)'s analysis of benefactive arguments as being generated either in the specifier of a designated applicative projection ApplP, which can attach above v P ("high applicative") or below v P ("low applicative", similarly Bosse at al. 2012). In a low benefactive, the benefactive argument is generated below v P and therefore below the agent, (1-a). I provide arguments that this is the right analysis for benefactive constructions in Greek-type voice systems and that in the corresponding self-benefactive, the benefactive argument moves from ApplP to the subject position and binds its trace, (1-b), a movement analysis of self-benefactives.

(1) a. Benefactive: [TP agenti [v P ti [benefactiveApplP [VP theme]]]]
b. Self-benefactive: [TP benefactivei [v P ti [ti ApplP [VP theme]]]]

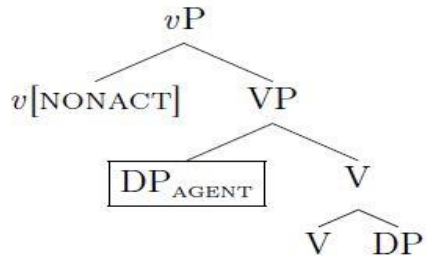
This means that a self-benefactive like (1-b) in a language with a Greek-type voice sys- tem fulfils the requirement for the Spell-Out of non-active morphology on the verb, since no external argument is introduced by v P. Self-benefactives consequently always surface with non-active morphology, even though they have the same surface structure as agen- tive transitive verbs (nominative subject, accusative object). This opens up the possibility of reanalysis of the surface

subject of a self-benefactive construction as an agent by a language acquirer, despite the non-active morphology on the verb. (2-a) shows the struc- ture of a self-benefactive before movement of the benefactive argument to subject position, (2-b) shows the reanalyzed deponent structure; the boxed DP is undergoing the reanalysis. This analysis provides a diachronic motivation for the unexpected combination of an agent subject with nonactive morphology. AG díz¯emai 'seek', which lacks self-benefactive semantics synchronically, would have started out as an oppositional self-benefactive like phéromai. Once there was no salient (self-)benefactive meaning that could serve as a cue for positing the presence of the projection Applben ("semantic bleaching"), a language learner is confronted with a transitive verb whose subject appears to be an agent, but which has non-active mor- phology. The learner can either "correct" this situation by switching to active morphology or posit a non-active verb with a non-canonical "low" agent, in accordance with the mechanism that assigns non-active morphology if there is no agent in Spec.v P. In this case, the learner has created a deponent. The loss of Applben can be understood as "structural simplification" (Roberts & Roussou 2003).

(2) a.



b.



Implications This reanalysis scenario provides a diachronic explanation for the switch from a canonical transitive non-active construction to a non-canonical agentive non-active construction in "voice syncretism" languages. The loss of self- benefactive meaning leads to a change during the acquisition of the argument structure of a given predicate, resulting in an agent instead of a benefactive argument. The same reanalysis process can be applied to the development of experiencer verbs denoting mental states into speech act de- ponents (e..g, Lat. hortor).

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How polite is *você* ('you')?

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European Portuguese is characterised by having numerous forms of address in more formal contexts to address a singular person. These consist of noun phrases which denote the kinship among participants, their professional relationship or even their social roles. Portuguese also relies on pronominal *formulae* for addressing people. The two main pronominal forms are *tu* ('you' 2nd person singular) and *você* ('you' 3rd person singular). Although it is clear that *tu* must be used for addressing a person with whom an addresser has a close relationship (friend, relative, partner), the pronoun *você* is apparently falling into disuse, due to the fact that speakers do not quite know when to use it and with whom. In other words, this pronoun seems to be very unstable and complex regarding its use and social acceptance.

According to Vázquez & Mendes (1971), Cunha & Cintra (1992) and Buzaglo et al. (2013) *você* stopped being suitable for polite situations around the 19th century, when it was becoming an informal pronoun (analogous to *tu*) and even offensive in some parts of Portugal (Faraco 1996; Menon 2006). Consequently, some new forms of address to replace *você* would have emerged. The most widespread and least marked of all would have been *o senhor* / *a senhora* ('sir' / 'madam') (Cintra 1972).

The aim of our presentation is twofold: (i) to describe the historical path of *você* in European Portuguese and to also its current use in Portugal; (ii) to attempt to indicate some possible answers to the question of our abstract title – How polite is *você* ('you')? In order to track the history of this pronoun over recent centuries and to describe its use, we have collected data from several *corpora* and

dialect atlases. First, we have analysed examples of the *Atlas lingüístico de la Península Ibérica* (Linguistic Atlas of the Iberian Peninsula) or ALPI. This atlas was compiled in the middle of the 20th century and it gathered dialect phenomena of all Romance languages spoken in the Iberian Peninsula. The informants had to be elderly men, living in a rural environment and without any educational background. Second, we have analysed the sociolinguistic and dialectal *corpus* CORDIAL-SIN, compiled by the Linguistics Centre of the University of Lisbon. This *corpus* was collected via interviews, at the end of the last century, of spontaneous speeches from elderly and illiterate informants from across Portugal. Finally, we have also drawn occurrences of explicit uses of *você* from the *corpus* Fly – Forgotten Letters, Years 1900-1974. This is a *corpus* of private Portuguese letters written in the 20th century, between 1900 and 1974. The authors and addressees are from different social and geographic backgrounds.

The final data show the infrequent usage of *você* as a polite pronoun and its maintenance as an informal pronoun in southern regions of Portugal, Alentejo. The northern and central areas do not (seem) to use this allocutive, with the preferred politeness strategy being the noun phrase *o senhor* / *a senhora* and 3rd person null subject. Furthermore, this situation suggests that *você*, as *vocês* in plural, has been affected by one of the possible evolutionary direction, in light of politeness theory: the courteous pronoun, when generalised throughout the social classes – as an effort to emulate the upper classes- , seems unable to occupy an informal or intimate context and might gain offensive or negative connotations. Politeness paradigm is then replicated by new allocutives. With our research we hope to contribute to a better understanding of how polite *você* is and to draw some possible explanations for its historical path by the various politeness theories (Brown and Gilman 1960; Brown and Levinson 1987; Watts 2003, among others).

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Reconstructing the morphology and syntax of core argument pronouns in Takanan languages (Amazonian Bolivia and Peru)

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The languages of the small Takanan family from the Amazonian lowlands of Bolivia and Peru (Cavineña, Ese Ejja, Araona, Tacana and Reyesano) manifest three distinct case-marking systems, from strictly ergative, to optionally ergative, and strictly neutral. The Tacana language is particularly interesting in manifesting the three systems at the same time, each system being characteristic of a different category of referents, as indicated in Figure 1, where the referents are ranked according to Silvestein's (1976) animacy hierarchy. Tacana case-marking is even more remarkable in that the distribution of ergative marking among the different types of referents does not follow Silvestein's predictions: strict marking should be at the right hand side, optional ergative marking in the middle, and lack of ergative marking at the left hand side.

Figure 1. Case marking in Tacana and Silverstein's (1976) animacy hierarchy

Independent pronouns		Nouns
1sg, 2sg	1dl, 1pl, 2dl, 2pl, 3dl, 3pl	3sg kinship > humans > animates > inanimates
ERG obligatory	ERG absent (neutral forms)	<----------ERG optional---------->

In order to explain how this counter-universal pattern came about, I reconstruct the history of ergative marking in NPs and pronouns in Tacana and in the rest of the Takanan languages. I present comparative evidence that the peculiarities of the Tacana case-marking system manifest the progressive loss of an ergative system that used to be rigid originally (reconstructible to proto-Takana). This original ergative system has been strictly retained in Cavineña and Ese Ejja, partly retained in Araona and Tacana, and completely lost in Reyesano. In Araona, one observes a phenomenon of renewal of ergative marking in some pronouns which had lost the ergative-absolutive distinction.

Finally, I explore different factors that might have contributed to the loss of ergative properties in Araona, Tacana and Reyesano, such as phonological loss and language obsolescence in contact with Spanish.

The study is based on the following descriptions of the languages: Guillaume (2008) for Cavineña, Vuillermet (2012) for Ese Ejja, Pitman (1980) and Emkow (2006) for Araona, Guillaume (2009) for Reyesano, and my own fieldnotes (2009-2013) for Tacana.

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Early Indo-European dialectal innovations reconsidered

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Early Indo-European dialectal differentiation is since Meillet's (1908) seminal work usually reconstructed starting from phonological, morphological and lexical isoglosses or clusters of isoglosses (the latter are considered stronger indicators than the individual features). Generally, grammatical indicators carry more weight than the lexical or phonological ones. Gamkrelidze and Ivanov (1984: 371-428) list 16 distinguishing morphological features, which underlie the first basic division of Indo-European into area A (Anatolian, Tocharian, Italic-Celtic-Illyrian), and area B, with two subgroups: Germanic-Balto-Slavic, and Aryan-Greek-Armenian. This division is not complete and it leaves out languages and variant details within the subgroups. Moreover, it assumes a relatively static model of early Indo-European, with splitting-up dates as the only significant points of differentiation. Even though we are dealing here with dialectal differentiation within an originally typologically coherent language group, internal and external contacts are potential sources of complex modifications at different stages of the development.

Gamkrelidze and Ivanov (1984: 393-4) ascribe the grammatical basis of the Indo-European dialects to differentiation of nominal and pronominal endings, comparative endings, athematic and thematic aorist, medio-passive endings, medium present participle endings, and conditional and modal endings. It is in fact a purely formal analysis, and neither clustering of properties nor their conceptual basis is revealed.

Reference to other data motivated alternative classifications. Schmidt (1996: 21-26) showed that Celtic shares some archaic (although not inherited) features with the eastern Indo-European languages. The shared features are: the future formation in *-sye/*-syo (ce.g., Gaulish, Chamaleères *bissíet* 'he will split', Vedic *kar-i-ṣ-yá-ti* 'he will make', Lithuanian *dúo-siu* 'I shall give'), the desiderative formation (e.g. Old Irish *cela* < cechlā- < *ki-klā- < *kikḷh-se/so: *celid* 'conceals', Sanskrit *cikīrṣati* (desiderative): *kar-* 'make'), and the inflected relative pronoun *yos (attested in Indo-Aryan, Greek, Phrygian, Slavic, and Celtiberian). These features are lacking in Italic and the other western Indo-European languages, and they crosscut the traditionally assumed dialectal areas. Notably, they refer to temporal, modal and deictic categories, which apply to the level of the predication, and are thereby different from the categories on the level of the predicate and the nominal phrase, which formed the basis for Gamkrelidze & Ivanov's classification. Particularly the status of temporal categories in Indo-European requires further clarification (cf. e.g. Szemerényi 1987).

My paper takes as the starting point another isogloss, which crosscuts the traditionally assumed dialectal areas of Indo-European: the generalization of the –s- aorist. As pointed out by Meillet (1908), Slavic, Greek and Celtic, in completely independent fashion, generalized the *–s-* morph to form the aorist (or preterite) of derived secondary verbs: Old Church Slavic *–axŭ, -ěxŭ, -ixŭ*; Greek *-ησα, -ωσα, -ευσα, -ασα, -ισα*; Old Irish (3rd sg.abs.) *–ais, -is*; Middle Welsh *–as, -es, -is, -wys* (whereas e.g. Latin incorporated it into its preterital system, for C# roots only, cf. Drinka 1990). In a historical perspective, this relates to the *–s-* morph having had a clearly aspectual meaning in Indo-European (cf. Watkins 1969), attested since the early-middle Indo-European (Meid 1975 etc.). Particularly the near-universal generalization of the *s*-aorist in Slavic was striking, because the intimately connected Baltic group shows no trace of it whatsoever. Also Celtic does not share this phenomenon with Italic or the other languages of the presumed Hittite-Tocharian-Italic-Celtic-Illyrian dialectal group.

Did the strong generalization of the *–s-* morph in Celtic, Greek and Slavic to the exclusion of the neighboring or related dialect areas, have a significant meaning? Watkins (1969) assumed that the *–s-* morph had a clearly aspectual meaning in Indo-European, so the systemic background to this development relates to the development of the aspect-tense system. For Slavic and Baltic, the different treatment (i.e. generalization of the *–s-* morph only in Slavic) can be ascribed to the highly developed aspectual system in Slavic, which is not matched by Baltic. As analysed by Wälchli (2001) and Arkad'ev (2012), even contemporary Baltic has not reached the stage of a fully developed aspectual system. Verbal particles of Latvian express modes of action, and even Lithuanian, with a partly developed system of preverbs as prefixes, still counts to languages which have lexical, but not grammatical aspect (i.e., there is an expression of terminativity, but absence of a full system of oppositions as in Slavic).

Greek also developed an aspectual system in which "the morphological expression of aspect emancipated itself increasingly from the other verbal categories". In Modern Greek the only difference between imperfect and aorist is between the Imperfective and Perfective forms of the stem. (The beginning occurred by a complex process in Ancient Greek when the (archaic) asigmatic aorist shared its suffixes with the imperfect, while the innovative sigmatic aorist shared them with the perfect. The asigmatic aorist was only a 'general past tense' (Hewson & Bubenik 1997: 252), whereas the (new) sigmatic aorist was marked for perfectivity positively by the suffix –s-.

My paper analyses the development of tense and aspect systems in Slavic, Celtic and Greek, pointing to similarities and differences in the development of their aspect systems in the perspective of relative chronology (adding to the data presented by Andersen 2013). I particularly focus on the degree of preverb incorporation during the different stages of the development of Celtic and Slavic, and on the connected syntactic properties, including word order and clitic landing. In the result, it is shown that the languages, which have developed grammatical aspect in addition to lexical aspect, have expanded this category both semantically and syntactically, influencing a number of further syntactic properties. This clustering of categories sheds additional light on variation in Early Indo-European and the question of Indo-European dialectal differentiation.

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The permeable boundary between composition and derivation

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The aim of this paper is to show how language change may shed light on morphological theory. Especially instances of recent changes show how theoretical demarcations do not match the reality of the data. Since we nowadays have access to more and better data than before, we are able to challenge theoretical assumptions about distinct morphological phenomena.

In synchronic descriptions of language there usually is a clear distinction between composition and derivation. Composition or compounding is a combination of lexemes, whereas derivation is a combination of a lexeme and a formative, a bound morpheme.

However, when one takes a look at language change it becomes clear that lexemes may change into derivational morphemes. A classical example is the German suffix –heit, which originates from an Old High German noun heid. Another well known example is the modern English suffix –hood which can be traced back within the history of English to the Old English noun hād (Olsen2014). Booij (2012:87) describes the change from Dutch boer 'farmer' to a suffix –boer 'seller'.

These examples make clear how the boundary between composition and derivation historically may be blurred. However, these examples also suggest that this process of losing morphological independence is a process that occurred long ago in the history of the language.

Precise microanalysis of recent morphological processes show that a change from lexeme to affix is still quite normal. In addition changes in the opposite direction also occur. Changes in which

reinterpretation of opaque forms lead to what Zwicky (2010) calls 'libfixes', that subsequently may become affix-like elements and finally even to new nouns, are rather frequent in modern languages.

For instance the English word entertainment has been reinterpreted as consisting of two parts: enter and tainment. Possibly portmanteau forms such as infotainment and docutainment may have been intermediate stages. Later on –tainment became a productive suffix, see sportainment and mathtainment. In modern Dutch similar forms have been taken over, which lead to an independent process, that resulted in forms such as muzitainment and corsotainment with main stress on the penultimate syllable. The next step in this very recent process are forms with stress shift such as Twenter-tainment and Limburg-tainment . In these forms main stress is on the first part and even on the first syllable just as in normal Dutch compounds. The final step is tainment as a free form, as a noun, which is attested already a few times.

This process, together with recent changes from affixes to lexemes and lexemes to affixes, show that the boundary between composition and derivation not only historically is blurred, but also synchronically is not as strict and impermeable as claimed in morphological theory.

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Are all Australian languages related? Evidence from the Non-Pama-Nyungan nominal class prefixes

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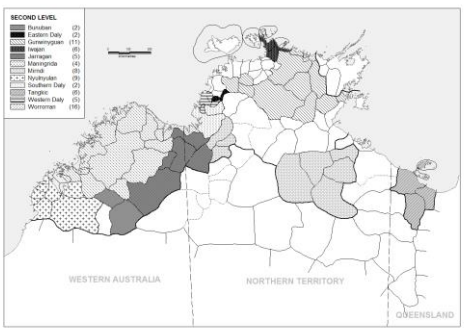
This paper considers the hypothesis that there is an Australian language family which includes all or nearly all Australian languages. There is substantial evidence that the great majority of Australian languages are related as members of the Pama-Nyungan [PN] family (Bowern & Atkinson 2012). The remaining languages are not currently analysed as genetically related, but rather as a disparate collection of small language families and isolates, labelled Non-Pama-Nyungan [NPN] (Map 1).



Map 1: NPN Languages

There are, however, a small number of recurrent lexical and grammatical similarities across the NPN languages, and including the PN languages. These similarities are the basis for proposals that all or nearly NPN languages, and the PN language family, are daughters of a higher level proto language, Proto-Australian [PA] (Evans 2003, 2005).

These proposals have not been evaluated according to the standard criteria of historical linguistics (Campbell &

Poser 2008: 159). That is, neither sound correspondences nor recurrent similarities in morphological features, especially irregular ones, have been established.

As an initial step in evaluating the PA hypothesis, we consider data from one morphological sub-system: nominal class prefixation. Many NPN languages have class prefix systems. We propose that PA had a class prefix paradigm, as set out in Table 1.

Class	Prefix	Principal lexical domain
I	**ci-*	Human Male
II	**ciɲ-*	Human Female
III	**ta-*	Animal
IV	**ma-*	Vegetable
V	**ku-*	Default

Table 1: PA Noun Class Prefixes

This paradigm has reflexes in approximately 40% of the NPN languages. The two inanimate classes IV and V have undergone lesser change in both exponence and lexical domain associations. The three animate classes – I, II, III – show greater change in both exponence and domain associations.

Our reconstruction differs significantly from Sands (1995:317), who proposes a nominal classifier system for PA. Sands had to rely on a considerably smaller and less accurate dataset, and she did not follow the standard Comparative Method (1995:287-289). We follow the Comparative Method, and show that the reconstructions in Table 1 conform to standard sound correspondences. For example, the reconstruction of the Class IV prefix as **ma*- is supported by lexical cognate sets showing the same correspondences -**ma* 'get' **maŋa* 'throat'.

Given that the reconstructions conform to standard correspondences, it is unlikely that they arose by chance (Harrison 2003). There are three independent types of evidence – limited lexical diffusion, geographical discontinuities, and morphological irregularities - which argue that diffusion is also an unlikely explanation for the recurrent similarities in prefix forms across the NPN languages. Shared lexical vocabulary rates are commonly low across the NPN languages (Harvey 2011). Morphological diffusion is non-standard in the absence of significant lexical diffusion or bilingual convergence scenarios.

Each of the proto-prefixes in Table 1 has its own distinctive discontinuous distribution of reflexes across the geographical range of the NPN languages. Given the varying discontinuous distributions of reflexes, a diffusional analysis faces significant challenges. By contrast, geographical discontinuities are a standard outcome in genetic analyses, and provide strong support to reconstructions and etymologies in general (Mailhammer 2014).

In a significant number of NPN languages, reflexes of the proto-prefixes in Table 1 show irregularities which have no evident source beyond the particular language: i.e. the simplest analysis is that these irregularities are autochthonous and result from language-internal changes. This suggests that the forms involved are unlikely to have been the result of recent language contact (horizontal transmission, see Mailhammer 2014). They could reflect more remote language contact, followed by language-internal change, but distinguishing this from inheritance is problematic. It is more probable that they are inherited (pure vertical transmission).

Overall, therefore, the various independent types of evidence agree that the best explanation for the recurrent and systematic correspondences in class prefixation across NPN languages is that they are inherited from a common ancestor - PA. Competing hypotheses holding that chance or horizontal

transmission are more likely would have to demonstrate that the distribution of reflexes found in the data is either random or that concrete scenarios of language contact can account for them. Consequently, there is evidence that the PA hypothesis is viable, and that further evaluation of this hypothesis and its consequences for analyses of Australian prehistory is warranted.

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Evidentials in a First Generation Homesign

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Zinacantec Family Homesign (hereafter "Z") is a new sign language emerging spontaneously in a single family in a remote Mayan Indian village in highland Chiapas, Mexico. Three deaf siblings, their speaking age-mates, and their infant children, who have had contact with no other deaf people, represent the first (and perhaps the last) generations of Z signers. The evidential system of the matrix spoken language of the community, Tzotzil (Mayan), is well-studied (deLeon 2007, Groark 2009, Haviland 1987, 1989), as are systems in related languages (Brody 1987; Hanks 1984, 1990, Zavala 2000; Altman 1996, Kockelman 2003ab, 2004). The Tzotzil system displays a tripartite structure (contrasting unmarked, "hearsay," and "direct knowledge" clauses), along with lexically marked epistemic modulators.

The special interest of the current research is the emerging linguistic structure in the nascent sign language. Because the sign language is in its first generation, Z presents an unusual opportunity to observe the early stages of linguistic innovation and change directly, providing unusually direct evidence of grammaticalization. Overviews of grammaticalization in sign languages (Pfau & Steinbach

2011, Janzen 2012) mostly involve progression from lexical signs to grammatical formatives. Though relatively recent, comparative studies of *emerging* rural sign languages (e.g., Zeshan 2003, 2004, 2006) have argued for possibly gestural origins for many grammatical formatives. Speakers' gestures are selectively borrowed and lexicalized into sign, and then, over time, systematically regimented into signed grammatical roles. (For such grammaticalization paths in established sign languages, see Wilcox & Wilcox 1995, Wilcox 2004, 2007, Janzen & Shaffer 2002.) Gestures used by speakers of spoken languages are plausible sources for at least some lexemes in the sign languages used by members of the same communities (Perniss & Zeshan, 2008; de Vos, 2012; Le Guen, 2012, Haviland 2013c, 2014).

In the present case, the nascent evidential system seems plainly linked to visible aspects of spoken interaction accessible to the deaf signers. Many such aspects are non-manual (Wilbur 2000), involving expressions of the face and attitudes of the body known to be expressive of the epistemic and subjective states (Traugott 1989, 1995, Shaffer 2004) which frequently figure in grammaticalized evidential systems, and which have become a central focus for analyzing the grammatical roles of non-manual components of sign (e.g., Stec 2012, McKee & Wallingford 2011, Dachkovsky 2004, Shaffer 2012). The paper explores evidential and epistemic marking devices in the ongoing course of development of Z, up to and including the only fluent 2nd generation signer (8-year-old son of the oldest deaf adult), to consider plausible gestural origins, evidence for grammaticalization, and also different sorts of syntactic status (from manual lexical signs to non-manual inflections) of putative evidential markers in Z, which express degrees of epistemic certainty and commitment.

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Syntactic change in the licensing of pre-nominal PPs in Hungarian

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Aims and claims: This paper investigates the syntactic licensing of PPs and adverbs as pre-nominal modifiers, and presents a case study of grammaticalization and syntactic change concerning such constructions in Hungarian. Bringing empirical data from Old and Middle Hungarian, it will be shown that the original present participial form of the copula (*való* 'being') became a general functional head in the constructions under investigation. By the end of the Old Hungarian period, a new participial copula (*lévő* 'being') took over its place (Kertész 1914) in pronominal PPs that required the copula, and a suffixal head (*-i*) became the licensor of many adverbial modifiers pre-nominally.

I will follow the literature in claiming that the originally participial construction with *való* is a way of licensing PPs and adverbs pre-nominally in a head final NP (see Szabolcsi & Laczkó 1992, Laczkó 1995), and the construction is later complemented by a growing number of post-nominal adjuncts and complement PPs (Simonyi 1914, Honti & H. Varga 2012). I will claim that (i) the grammaticalization of *való* into a functional, predicative head resulted in the general use of the construction in Old Hungarian, even in contexts where it seems redundant at first sight; (ii) due to the loss of *való*'s copular use, the new participial copula *lévő* appeared in those constructions where predicative PPs were used pre-nominally; (iii) during the Middle and Modern Hungarian period, new ways developed and later became more frequent in the marking of PPs and adverbs as pre-nominal

modifiers (the *-i* suffix and e.g. the participle *történő* ‘happening’), resulting in a more complex system of licensing pre-nominal adverbials and PPs.

The data: Old Hungarian *való* appears with adverbial or PP complements and modifiers when they are pre-nominal, (1). The noun head is often a deverbal noun, which may retain the argument structure of its verbal root (with a PP adjunct in (1b) and a complement in (1c)), but it can be a regular non-derived noun as well, (1a).

(1) a. mend paradisum-ben **uolov** gimilc-íc-tul
all Paradise-INE be.PART fruit-PL-ABL
‘from all fruits in Paradise’ (Funeral Sermon, c. 1195)

b. Mosdatlan kèz-zèl **ualo** kener etel
unwashed hand-INST be.PART bread eating
‘eating bread with unwashed hand(s)’ (Munich Codex 22ra, 1466)

c. az-on **valo** feelt-em-ben
that-SUP be.PART fear-POSS.1SG-INE
‘in my fear of that’ (Jordánszky C. 25, 1516-1519)

The construction with the present participle form of the copula is claimed to be shared within the Ugric languages of the Finno-Ugric family (Honti & H. Varga 2012). The construction was probably originally a genuine participial clause which appeared pre-nominally in the head-final NP, however, some uses of *való* had become more grammaticalized. By the early texts of Old Hungarian, it was generally used with pre-nominal PPs (including DPs with an oblique suffix) and adverbs (e.g. *gyakorta* ‘often’, *mostan* ‘now’), and since the NP tended to be head-final, these modifiers were quite frequent.

In Late Old Hungarian, a new construction appeared with the participial form *lévő* ‘being’ next to predicative PPs used as pre-nominal modifiers, (2), and it was spreading in Middle Hungarian, (3), gradually replacing *való* in this context.

(2) Az Gondolatok kerol **leuo** uétkek
the thoughts around be.PART sins
‘the sins surrounding thoughts’ (Thewrewk Codex, beginning of 16th c.)

(3) az ablak-om-on **lévő** kis lyuk-on
the window-POSS.1SG-SUP be.PART small hole-SUP
‘on the small hole on my window’ (Witch trial, 1732)

A further alternative construction began to spread (helped by prescriptive grammarians) in Late Middle Hungarian and Early Modern Hungarian: the suffix *-i* became a marker of modifiers as well. This suffix cannot be added to suffixal PPs (due to a morphological restriction), but it became the construction used with adverbs, e.g. *gyakor-i* ‘frequent’ instead of the earlier *gyakorta való* ‘often being’.

Analysis: Discussing the syntax of *való* in Modern Hungarian, Laczkó & Rákosi (2007) claim that it has three different variants (an adjective, a participle and a ‘function word’) and the one relevant for us, the one in nominal constructions, is a ‘function word’ and not a real participle, as it has a different distribution from the present participle of the copula. I propose that *való*, which used to be the regular present participial copula, underwent a grammaticalization process and became a functional head in the NP-domain, which I take to be a Relator head in the sense of den Dikken (2006). This head

is spelled out when a post-nominal complement or adjunct PP (e.g. *az-on* 'on that') is moved into the pre-nominal modifier position, (4).

(4) $[_{PP2}\ [_{DP}\ [_{RP}\ [_{PP1}$ az-on$]\ [_{R'}$ valo $[_{N}$ feeltem $t_{PP1}]]]]$ -ben] (ex. (1c))

The old participial form of the copula is morphologically unchanged, but it is no longer a real copula in the sense of only connecting predicative PPs; the latter function was taken over by *lévő*. *Lévő* is the verbal head in pre-nominal participial copular clauses; its distribution is that of a copula (e.g. in (2) and (3)).

Apart from the general functional head *való* and the (participial) copular *lévő*, the above mentioned *-i* suffix can also license pre-nominal PPs/adverbs, and it has recently been analyzed as a functional head in a Modifier Phrase within the NP (Kenesei 2014). This is in line with the proposed analysis of *való*, and I follow this assumption by claiming that it also spells out a predicative head (a Relator) within the NP, and it changed the distribution of *való* as compared to its Old Hungarian generalized use.

The syntactic changes lead to the diversification of functional elements that may license PPs/adverbs pre-nominally, and a diversification of selectional criteria. By the Modern Hungarian period, the selection of functional elements depends on the eventive vs. non-eventive and dynamic vs. stative nature of the nominal(ization) we are dealing with (Laczkó 1995), in contrast with the generalized use of *való* in Old Hungarian. At the same time, post-nominal word order of complement PPs became more frequent (although restricted), e.g. *találkozás Péter-rel* 'meeting Peter-with', which correlates with the general change from strictly head-final to more head-initial structures in the language (see É. Kiss 2014).

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Much progress has been made in recent years on the reconstruction of Old Chinese, the language reflected in the phonetic series of the early Chinese script, and the rhymes of the Shijing, which is the ancestor to all Sinitic languages (cf. Baxter & Sagart 2014). These new developments necessarily impact the elaboration of regular sound laws with those languages to which Chinese is kin (Simon 1930, Gong 1995). This paper shall elaborate all identifiable innovations of Old Chinese vis à vis the Ursprache from which Old Chinese, Tibetan, and Burmese descend. Particular attention is paid to the origins of the six vowel system of Old Chinese (cf. Hill 2013), the correspondences of resonant finals among these three languages (cf. Hill 2014), and the origins of the A/B distinction. A particular innovation of this paper is to emphasize the working out of the relative chronology of the relevant changes.

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Old Irish Consonant Quality Reexamined

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Pedersen (1913) and Thurneysen (1946) considered Old Irish to have had three different consonant qualities, *i*-colored or palatalized (before original front vowel), *u*-colored or labiovelarized (before original *u*-vowel), and neutral (elsewhere). The first two are (not fully systematically) indicated by preconsonantal *i* and *u* respectively, functioning as diacritics and presumably capturing the front or labiovelar onglide of such consonants. It is also acknowledged that by late Old Irish, *u*-color merged with neutral color.

Greene (1962, 1973, 1976) rejected this view, based on the following arguments (Greene 1962). 1. Having three different consonant qualities is rare; 2. the alleged *u*-color has little functional load; 3. later Irish only distinguishes *i*- and neutral quality; 4. *u* is not used to indicate *u*-quality. Greene therefore proposes that the *u* appearing before consonants once followed by *u*-vowels constitutes the second element of a true diphthong. (Jaskuła 2014 modifies Green's argument by claiming that that *u*-color is not distinctive.)

None of these arguments are cogent. First, rarity does not imply impossibility; languages like Burmese, Lezgian, and Nupe have all three "colors" (Watkins 2001, Haspelmath 1993, Hyman 1970, 1973). Second, low functional load may possibly lead to a contrast being lost, but there is no evidence for its preventing a contrast from arising. Third, Pedersen and Thurneysen account for the later Irish absence of *u*-color as resulting from merger with neutral color. Finally, Greene's argument 4 rests on the assumption that preconsonantal *u* is not a diacritic of *u*-quality but part of a diphthong; without further evidence, this argument is circular. (Some of these arguments converge with Anderson 2011 and McCone 2011.)

I present arguments that in its early history Old Irish must have had *u*-quality. These include parallelism of the orthographic evidence (which is lost under Greene's account) as well as the striking parallelism of Avestan; the fact that Greene's "diphthongal" account is phonetically unmotivated, unless preceded by an earlier labiovelarized stage (see e.g. Hock 1985); and the fact that consonant color assimilations in secondary clusters can be explained by assuming a labiovelarized stage, but require an unnecessarily complex account under Greene's hypothesis.

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Word stress as a function of utterance rhythm in Middle English

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Formal accounts of English prosody usually discuss stress as a word-level phenomenon which can be related by formal rules to the phonotactic characteristics and the syntactic class of the lexeme in question (e.g. Hayes 1982). In such accounts the various levels of grammar (lexicon, syntax, morphology, phonology) are explicitly or implicitly conceived of as modules that interact in a serial way, precluding the feedback of phonological constraints in actual utterances on higher levels of linguistic structure (cf. Zwicky & Pullum 1986). In contrast, functionalist approaches to language, such as Natural Phonology and Natural Morphology (Stampe 1979; Dressler et al. 1987), express the general view that the concrete conditions of actual language use can and constantly do shape linguistic structure.

One problem that has been difficult to reconcile with the formal linguistic approach is the fact that the English language accommodates a considerable number of stress doublets. These are lexical items within one and the same syntactic class, displaying identical syllable structures but different stress patterns, e.g. ***con****cert (N)* vs. *con****cern*** *(N)*. Historically, these doublets have arisen through the large-scale introduction of French loanwords in Middle English, which were prosodically more prominent on the right edges, while 'native' OE words were stressed root-initially, usually coinciding with the left edges of words. Since the existence of such doublets cannot be easily accounted for by rules regarding phonotactic shape and syntactic class, it is at least reasonable to assume that, diachronically speaking, other factors may have played a role in assigning word stress to either the first or the second syllable of disyllabic words.

It is the aim of the proposed study to test, in the spirit of Natural Linguistics, whether the eurhythmic constraint of rhythmic alternation, i.e. the preference for stressed and unstressed syllables to follow one another (Couper-Kuhlen 1986: 60; Schlüter 2005: 17-20), on the level of utterances rather than words may have contributed to the lexicalisation of different stress patterns already during the Middle English period. Put differently, if utterance rhythm did have an effect on word-level stress assignment, it can be expected that disyllabic Romance loans such as *de****gree***, for example, will tend to retain right-hand prominence if they were usually followed by an unstressed syllable (e.g. a function word) according to typical phrase structure contexts or collocational preferences.

In order to corroborate or falsify the hypothesis that utterance rhythm influenced word stress, the study will draw on quantitative data collected in a database of Middle English word stress patterns. The database consists of a selection of etymons of both Anglo-Saxon and Romance origin. These

etymons are searched for in corpora of Middle English prose (from PPCME2) and verse (under construction). The verse component of the database will help to identify the preferred stress positions in Middle English by means of a rigorous quantitative analysis, while special care will be paid to the relationship between conventions of versification and reconstructed spoken prosody (Minkova 1996; 2014: 307). In the database, the individual tokens are densely annotated with respect to various factors regarded as informative concerning stress assignment, such as the tokens' phonotactic and morphological structure, their position in verse lines, their immediate utterance context and their spelling. Extralinguistic information pertaining to the texts in which the tokens are found is also recorded so as to allow diachronic analysis.

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Kurtöp: a case study in historical linguistics and language contact in the Eastern Himalayas

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It is often assumed that the languages of Bhutan are all simply dialects of Tibetan. While it is true that Dzongkha, the national language, is a Tibetan dialect, most of Bhutan's approximately 18 additional languages fit elsewhere within the Tibeto-Burman language family (van Driem 1998). The East Bodish languages, such as Bumthap, Kurtöp, Dakpa and Dzala, have been discussed in comparison to Tibetan in several articles, such as Michailovsky & Mazaudon (1994) and DeLancey (2008). Bradley (1997) proposes that the East Bodish languages are sisters to the Tibetan dialects.

However, closer comparative work within the East Bodish languages may suggest that much of the apparent similarity between Tibetan and the East Bodish languages is due to borrowing. In this talk I focus on several aspects of Kurtöp grammar and lexicon, showing how their historical development can be explained through a combination of genetic descent and contact.

On the surface, some Kurtöp allomorphy appears to be similar to Tibetan. The perfective suffix *-pa*, for example, exhibits alternations almost identical to what is reported for Tibetan, suggesting shared innovation (DeLancey 2008). However, a study of several Kurtöp dialects reveals the allomorphy is limited to northern varieties of Kurtöp; elsewhere *-pa* is always *-pa*. The most prudent explanation for this is that the allomorphy, where it is present, has been borrowed.

Lexically, many Kurtöp words appear very similar to Tibetan. A cursory comparison of words for 'otter' (Kurtöp *rám* and WT *sram*), for example, suggests a close relationship. Comparative research, however, points to the Kurtöp form actually being a reflex of Proto East Bodish **kram* 'otter' (Hyslop 2014).

A few grammatical morphemes can be shown to be native forms which have merged with Tibetan forms. This is true of the genitive *=li ~ =gi ~ =i* and locative *=ro ~ =to ~ =do ~ =o ~ =ko*. The verb *ni* 'to be at', which plays a role in marking habitual aspect in the grammar, seems to be a blend between Proto East Bodish **nik* and Tibetan *nas*, based on language internal and comparative evidence.

In sum, having walked carefully through several aspects of Kurtöp grammar, we see that language internal and external data suggest the development of various lexical and grammatical features of the language is complex. At times simple historical development appears to suggest a close relationship with Tibetan, but this appearance is accidental. At other times the similarities can be attributed, in part, by contact. In short, in order to truly understand the historical development of Kurtöp -- and other languages -- we need careful comparative work that shows us how the layers have developed through contact over time.

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Tonal marking of intransitive predications in Manding-Mokole as a result of language contact

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At least two Manding-Mokole languages (Mande, Western, Central) have been reported to use differences in tone for marking the transitivity status of the verb in constructions that otherwise contain the same TAM marker in the immediately post-subject slot, the so-called predicative marker. Thus, according to Creissels (2013), in Mandinka the negative perfective marker and the negative copula used in the future and progressive constructions have two variants depending on whether the construction is transitive or intransitive. The variant used in the intransitive construction has a floating L tone following it: transitive *máŋ* vs. intransitive *máŋ* ^{L} for the negative perfective marker and transitive *té* vs. intransitive *té* ^{L} for the negative copula. In Kakabe, as described by Vydrina (2013), the lexical H tone of a verb in any intransitive construction involving a predicative marker can optionally be changed to L. This lowering of the tone of the verb can alternatively be analysed by positing a floating L following the predicative marker, similarly to what Creissels (2013) does for Mandinka.

This tonal intransitive marker in the slot immediately following the predicative marker is extremely puzzling, since Mande morphosyntax provides no natural pathway for its language-internal emergence. Furthermore, its emergence cannot be accounted for by any direct transfer from a neighbouring language, since to the best of my knowledge, no other language outside of the Manding-Mokole group in the region has been reported to have a comparable marker. Still, I argue that the solution to this puzzle does involve language contact, namely the contact with Soninke (Mande, Western, Soninke-Bozo), but that the transfer has occurred through mistaken matching of the tonal properties of two Soninke constructions that happen to be otherwise formally and semantically very similar to the two target Manding-Mokole constructions. In particular, I argue that the floating L intransitive marker is a result of an imperfect transfer of the L tone morphological operation used in Soninke on verbs, irrespective of their transitivity, in combination with the negative perfective marker *má* and the negative imperfective marker *ntá* (cf. Rialland 1990, Diagana 1995). It is important that unlike in Manding-Mokole, in Soninke the L tone morphological operation under negation can be accounted for language-internally. The transfer has been triggered by the formal and semantic similarity of the respective predicative markers in Soninke and Manding-Mokole in those contexts where the relation between the negative predicative marker and the tone marking on the verb in Soninke would be most obvious to Manding-Mokole speakers as compared to their native pattern with no additional tone marking, viz. when the verb is immediately adjacent to the predicative marker, i.e. in intransitive constructions.

Aspectual change in English *-ing* and German *-ung* nominalizations

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1. English *ing* nominalizations with argument structure are known to be aspectually restricted: they select atelic verbs or the process part of accomplishments, and thus qualify as mono-eventive (Borer 2013 a.o.). In contrast, German *ung* nominals reject mono-eventive verbs and involve bi-eventivity (Roßdeutscher & Kamp 2010). Given that the two suffixes have a common Proto-Germanic source—namely, **inga/*unga* (Munske 1964)—, the question arises as to what factors have led to the difference in Present-Day English (PDE) and German (PDG). In older stages of the two languages, both *ing* and *ung* seem to have attached to mono-eventive as well as bi-eventive verbs, but the English suffix specialized as mono-eventive, while the German one came to be restricted to bi-eventivity. We argue that an interplay of morphological and syntactic-semantic grammaticalization factors brought about these changes, in particular, the competition with the Anglo-Norman suffixes *ation*/*al*/*ance*/*ment*, the loss of grammatical gender and the simultaneous development of the progressive in English, and a decline in the productivity of *ung* nominals in favor of nominal infinitives in German. Examples with argument structure are used to exclude lexicalized readings of these nominals.

2. Borer (2013) shows that **PDE *ing* nominals** are atelic, as they exclude telic events that involve a result state. *Ing* rejects achievements in (1) and fails telicity tests with accomplishments (see *for*- vs. *in*-adverbials and *take x-time* in (2)). Suffixes like *tion*/*al*/*ance* convey these readings instead (e.g., (2b)).

(1) *Kim's *reaching* of the summit/*Robin's *finding* of (the) oil/*the *arriving* of the train

(2) a. Robin's dissolving of these chemicals/writing of the letter *for*/**in* three hours
b. The *separation*/**separating* of the pupils (by the teacher) *took one hour*.

On the basis of Rappaport Hovav & Levin's (2010) distinction between manner and result verbs (i.e., verbs whose roots express the manner or the result of an event: e.g., *to wipe the table* (3a) vs. *to clean the table* (3b)), Alexiadou et al. (2013) argue that *ing* selects mono-eventive structures as in (3a) and cannot include a result state component that is part of bi-eventive structures as in (3b).

(3) a. [[x act$_{<manner>}$]]
manner/mono-eventive verbs
b. [[x act$_{<manner>}$][cause [become [y <state>]]]] *result/bi-eventive verbs*

Roßdeutscher & Kamp (2010) argue that **PDG *ung* nominals** can only be formed from result verbs as in (3b). They select simple or prefix/particle verbs that involve a result state introduced by an 'adjectival'/ 'nominal' root (see *säubern* 'to clean' < *sauber* 'clean', *auf-frischen* 'to refresh', *er-müden* 'to become tired', *zeichnen* 'to draw' < *zeichen* 'sign', *be-stuhlen* 'to furnish' < *stuhl* 'chair', etc). They reject event-describing roots whether the verb is non-core transitive, unaccusative or unergative (e.g., *schreiben* 'to write', *schießen* 'to shoot', *fallen* 'to fall', *modern* 'to rot', *gleiten* 'to slide', *treiben* 'to drift/float'). The presence of a result state and thus telicity in *ung*-nominals is confirmed by their compatibility with terminative predicates, by contrast to the nominal infinitive in (4) (from Ehrich 1991).

(4) a. die Leerung/*das Leeren des Briefkastens *ist abgeschlossen.*
the empty.Ung/the empty.Inf the.Gen mailbox is completed
b. die Belagerung/*das Belagern der Stadt *ist beendet worden.*
the siege.Ung/the siege.Inf the.Gen city has been ended

In conclusion, PD *ing* and *ung* contrast in their event structure: *ing* realizes mono-eventivity as in (3a) and *ung* realizes bi-eventivity as in (3b). In addition, each of them is complemented by another

nominalization pattern: Anglo-Norman suffixes realize (3b) in English, while the nominal infinitive realizes (3a) in German (see Alexiadou et al. 2013 for further details).

3. In **Old English (OE) and Old High German (OHG)**, deverbal *ing* and *ung* nouns had a similar aspectual behavior (Werner 2012). Hindorf (1985) notes that OE deverbal *ing* (and its OE *ung* allomorph) had less of a process reading than in PDE and it could denote states. As evidence, she invokes its ability to express emotional states and its standard use in the plural (which is excluded in PDE, Grimshaw 1990). Hindorf reports highly frequent (result) state-denoting nominals like *gitsung* 'greed' (< *gītsian* 'to desire/ lust'), *geearnung* 'merit', *willnung* 'desire', *hreowsung* 'repentance' (< *hreowsian* 'to rue/repent'), *costung* 'temptation' (< *costian* 'to try/tempt'). The presence of result nouns as *onwriting* 'inscription', *bytling* 'building' (see Kastovsky 1985), enforces the idea that *ing* could express telicity, since result nouns are formed from telic verbs (Grimshaw 1990). This claim is also supported by the high frequency of plural *ing* nominals, given that plural is impossible with atelic/mass nominals (Alexiadou et al. 2010): see OE *rædinga haligra boca* 'readings of holy books', Middle English (ME) *anoyntyngis of oyle of bawme* 'applications of balm oil' (Crespo 2012), *playingis of balles* 'playings of balls' (Visser 1972).

In OHG, *ung* is also known to have been aspectually flexible, as it easily attached to atelic/mono-eventive verbs (cf. OHG *bellunga* – PDG **Bellung* 'barking', *bibinunga* – **Bebung* 'shaking', *fluochunga* – *Fluch*/**Fluchung* 'cursing', *kochunga* – **Kochung* 'cooking'). In addition, OHG *ung* nouns were more frequently used in plural, which indicates a higher morphological flexibility than in PDG (Lingl 1934).

4. We present two main factors that explain **the aspectual change in *ing* and *ung* nominals**: 1) the competition with other morphological patterns, and 2) the grammaticalization of the progressive. The first one concerns both *ing* and *ung*, modulo language-internal conditions, while the second applies only to English *ing*. As illustrated in (2b), in PDE bi-eventive readings are expressed by Latinate suffixes, which entered the language via Anglo-Norman during ME. We show that in late ME all these suffixes (*tion*/*ment*/ *al*/*ance*) were productive (with both Latinate and native verbs) and expressed telic events (Marchand 1969, Lloyd 2011). We argue that *ing* lost the ability to denote result states/telicity due to the parallel emergence of the progressive which has its source in prepositional constructions with *ing* nominals (e.g. *He was on/a hunting*) and the phonological coalescence of *ing* with the participial form *ind*/*end* (Alexiadou 2013 and references therein; cf. Visser 1972). Given that the progressive emerged as imperfective/atelic aspect, this value was transfered to nominal *ing* as well. A pre-condition that may have favored this is the fact that in OE abstract *ing* nominals had feminine gender, which usually associated with a collective/mass denotation (Werner 2012). With the loss of gender in ME and given also the formation of the progressive, the mass meaning grammaticalized for *ing* nominals in general.

We argue that German *ung* specialized for bi-eventive events as a result of its decline in productivity and the competition with the increasingly productive nominal infinitive (Ten Cate 1985, Demske 2002, Werner 2012). Demske shows that Early New High German (17-18th c.) still formed mono-eventive *ung* nominals like *ansehung* 'looking at', *murmelung* 'grumbling', *vertrawung* 'trusting', which are replaced by infinitives in PDG. At the same time, she notes that *ung* nominals were often coordinated with infinitives in denoting processes, which illustrates the aspectual similarity of the two constructions at this time: e.g. *das Stadische Kriegsvolck hat vergangen wochen diser orten dem Land vnd wandersleuten mit **plündern vnd Brandschatzung** grossen schaden gethan* 'last week, the estates' soldiery caused a lot of damage to the country and some wayfarers **by raiding and pillaging**'.

5. In **conclusion**, our study illustrates language change as an interplay between morphology and syntax-semantics in the development of a common Germanic nominalization pattern in two different languages. While in German a decline in suffixal productivity leads to a specialized syntax-semantics for

ung nominals, the specialization of English *ing* nominals is the result of an additional aspectual grammaticalization in the morphological use of the suffix *ing*.

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On the development of the infinitival marker *zu* 'to' in the history of German. A corpus-based analysis.

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Introduction. In this talk, we will examine the development of the infinitive marker *zu* 'to' in the history of German and provide a corpus-based analysis of its licensing conditions from (O)ld (H)igh (G)erman (750 - 1050) to (M)odern (G)erman (1900 -). The main focus is on three matrix predicates: (i) the subject-to-subject raising use of *beginnen* 'begin', (ii) the subject control predicate *gedenken* 'intend' and (iii) the object control verb *bitten* 'ask'. The main objective of this talk is to show that although all these three predicates require the presence of *zu* in MG when an infinitive is embedded,

zu-infinitives prevailed in different language periods (*beginnen*: 19th cent., *gedenken*: 13th cent., *bitten*: 15th cent.). As it turns out, these differences follow from their syntactic orientation (raising vs. control) and, simultaneously, from their semantics (inceptive vs. desiderative vs. directive).

Puzzle. Infinitive complements in Modern German can be divided into two groups. The majority of infinitive-embedding predicates selects for infinitives headed by *zu*. In [1] *beginnen* embeds the infinitive *sprechen* 'speak' and *zu* may not be dropped:

[1] *Die Dinge Beginnen *(zu) sprechen*
the things begin.3PL to speak.INF
'The things start to talk (to us).'

(DeReKo, *Mannheimer Morgen*, 24/11/2000)

To the second group belong predicates licensing infinitives without *zu*. AcI verbs, as *hören* 'hear' in [2], are a case in point:

[2] *Das Eis War schon gebrochen, als sie Den Österreicher Zum ersten*
The ice be.3SG.PST already break.PTCP When she The Austrian for.the first

*Mal (*zu) sprechen hörte* (DeReKo, *Braunschweiger Zeitung*, 17/2/2006)
Time to speak.INF hear.3SG.PST
'The ice was already broken up when she heard the Austrian speak for the first time.'

Following Biskup (2014) and Wilder (1988), we argue that *zu* merges as a C-head with an empty specifier position in the left periphery of the embedded clause. Accordingly, if complements to AcI verbs are TPs (cf. Haider 2009: 272-353) and if *zu* spells out as a C-head, then this accounts for why *zu* is not licit in AcI complements - there is no position for it. Remarkably, in older stages of German both predicate groups could occur with bare infinitives, cf. [3] for *beginnen* and [4] for *hören* from OHG:

[3] *Bigunston auh | erist umbi sinan | namun sprehhan*
begin.3PL.PST also first over his name speak.INF
'They began talking about his name.' (Isi 524-5)

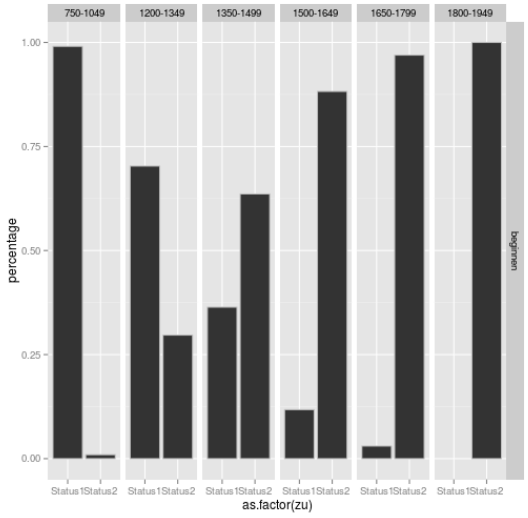
[4] *Tho ward hímil offan, then fáter Hort er spréchan*
then become.3SG.PST heaven open the father.ACC hear.3SG.PST he speak.INF
'When the heaven opened, he heard the God speak.' (Otf I, 25: 15)

The absence of *zu* in [4] is not surprising. As elaborately discussed in Speyer (2001, 2015), although AcI complements have changed their syntactic size over time (from CPs to TPs/vPs), they never switched to *zu*-infinitives. The example given in [3], in turn, deviates from what we have already observed in [1]. In the OHG example *zu* is missing and its lack has been traced back to the grammaticalization of the local-allative preposition *zu* - depending on the approach - into a verbal prefix (Abraham 2004, Haider 2009, Sternefeld 2008) or into an infinitive complementizer (Biskup 2014, Wilder 1988). However, to the best of our knowledge there are no studies illustrating how this

grammaticalization process proceeded in the entire history of German language (750 – 1900) and with respect to particular matrix predicates.

Data. In total, we have extracted and analyzed approx. 3000 examples from all stages of German. As far as OHG sources are concerned, we looked into *Boethius >>De consolation philosophise<<* and *Psalter* by Notker der Deutsche, *Isidor*, *Evangelienbuch* by Otfrid von Weißenburg, *Tatian* as well as *Willirams Kommentar des Hohen Liedes*. As for other language periods, we extracted the date from larger corpora (e. g. *Mittelhochdeutsche Begriffsdatenbank* (MHG), *Referenzkorpus Frühneu-hochdeutsch* (ENHG), *DeReKo* (NHG)).

Diachronic analysis. Figure 1 demonstrates how infinitives selected by *beginnen* developed in the history of German as well as to what extent and how long bare infinitives competed with their *zu*-counterparts. Whereas in OHG the majority of the embedded complements occurred without *zu*, *zu*-infinitives began to gain ground in the period from 1350 to 1500, i. e. in ENHG. Though this process was completed first in the 19th cent. In comparison to complements selected by *gedenken* and *bitten*, which started taking regularly *zu*-infinitives from the 13th and 15th cent. onwards, the 19th cent. appears to be surprising. Based on this contrast, we argue that *zu* was grammaticalized already in the oldest stages of German as infinitive complementizer and that its licensing conditions are to be deduced from the syntax and semantics of matrix predicates. Hence, even if *zu* is absent on the surface, we claim that it is realized in the internal syntax as a covert C-head. In addition, the approach taken here also nicely accounts for why *zu* could assign a case value to the embedded T-head (Genitive in *nes*-, Dativ in *ne*-, and Instrumental in *nu*-infinitives). If *zu* merges as a C-head, it automatically becomes responsible for case. Given feature inheritance, it passes down its features to T acting as a probe for a goal.



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A common problem in dealing with matters of both grammar and the lexicon in languages that are in heavy contact zones is distinguishing between innovations in a given language that are due to borrowing on the one hand and those that are due to inheritance or language-internal developments on the other. In this paper, I examine, or rather re-examine, the issue of the diminutive suffix with the form [-itsa] in the languages of the Balkan Sprachbund, and especially in Greek. I say "re-examine" because it might be thought that the massive 400-page study of the matter by Demetrius Georgacas (Georgacas 1982), given the exhaustiveness of his treatment, would have settled the question in favor of a native Greek development out of an earlier diminutive suffix with the nucleus *–iki-*. I argue here, however, that despite the detail and care in Georgacas's work, his conclusion that Greek *–itsa* is a native development needs to be reevaluated owing to advances in our understanding of certain aspects of the empirical and theoretical bases for his argumentation. While admittedly focusing on just a single item amidst the many loans and native developments throughout the Balkans for which language contact is a constant that the historical linguist must always keep in mind, I argue that this particular case study is especially important as it is illustrative of the methodological difficulties in teasing out borrowing versus inheritance, in that its solution requires a blend of philological, historical, and sociological evidence, thus demonstrating the multi-faceted nature of research in areas of heavy language contact. Moreover, the ultimate solution to this crux depends on a view of borrowing versus inheritance that is not a binary choice but rather sees the contact situation as providing resources for the enhancement of natively arrived at innovations.

The facts are relatively simple: a suffix with diminutive value and with the shape [-itsa] occurs in the northern Balkan languages, e.g. Albanian *rrug**icë*** 'alley' (cf. *rrugë* 'road'), Bulgarian *ribč**itsa*** 'little fish' (cf. *ribka* 'small fish' (< *riba* 'fish'), Macedonian *sestritsa* 'little sister' (*cf. sestra* 'sister'), Romanian *mînuşiţa* 'little hand' (*cf. mînă* 'hand', with *-uş*-diminutive as well). This suffix is generally held, uncontroversially, to be a Slavicism, inasmuch as it is found elsewhere in Slavic, mostly as a feminizing suffix (e.g. Russian *tsar**itsa*** 'tsarina'), but in some instances with diminutive(-like) value, at least in origin, as in Russian *jagod**itsa*** 'buttock, nipple' (cf. *jagoda* 'berry', thus literally "little berry") or *bessmysl**itsa*** 'nonsense' (diminutive as dismissive or belittling), so that Balkan Slavic, as seen in Bulgarian and Macedonian, is the likely source of the Albanian and Romanian suffixes.

A diminutive suffix *–itsa* also occurs in Greek, e.g. *Elen**itsa*** 'diminutive of *Eleni', fusk**itsa*** **'**little bubble; round little face' (*cf. fuska* 'bubble'), and it is here that there is, and has been for over 100 years, considerable controversy as to the origin of *–itsa*. Emblematic of the controversy and the difficulty in resolving the matter of its origin is the fact that the noted Greek linguist, George Hatzidakis, changed his mind several times throughout his career (Georgacas 1982: 31), vacillating between taking *-itsa* as a Slavic borrowing and treating it as a Greek-internal development. It is recognized by all that there are lexical items of Slavic origin in Greek, as many as 250 perhaps (Georgacas 1982: 45), e.g. *ververitsa* 'squirrel' (cf. Blg *ververica*), *mousitsa* 'gnat, midge' (Slavic *mъšica*, diminutive of *muxa* 'fly'), though most are not in common use now and are best attested in northern dialects. And, there are also many toponyms (Vasmer 1941), e.g. *Granitsa*, *Stemnitsa*, and *Tsernitsa*.

Georgacas seemingly settles the question by arguing that apart from the clear loans, Greek diminutive *-itsa* has a Greek source, deriving from a colloquial late Koine (c. 4th century AD) palatalization and affricativization (suggested by Coptic borrowings from Greek, e.g. *sibōtos* from *kibōtos* 'ark) of the *-k-* of the Ancient Greek diminutive suffix *-ikion*. Similarly, Georgacas (1982: 30-31) was persuaded by the widespread, truly pan-Hellenic, distribution of *-itsa* as opposed to the far more localized dialect geography of clear Slavic loans, and by the absence of Slavic loans from several parts of the Greek-speaking world, e.g. southern Italy and the Pontic areas, as opposed to the presence of *–itsa.* He also argued that borrowing of affixes is extremely limited.

Based on what we now know about morphological borrowing (e.g., Thomason and Kaufman 1988), about Coptic phonology, and about the diffusion of linguistic innovations (e.g. the "gravity model" of Trudgill & Chambers 1980 and the conversational model of spread of Friedman & Joseph 2014), Georgacas's position must be reevaluated. In particular, it is known now that suffixes can be borrowed, especially when they enter a language attached to a base word. As for the distribution of the suffix within Greek, one could simply appeal to internal spread, from dialect to dialect, to explain the distribution, with the outlying areas being reached by a highly expressive, and thus conversationally bound, suffix even though they are far from centers of "gravity", while other content-based Slavic loans would be tied to regions and thus excluded from widespread diffusion. Moreover, new interpretations of Coptic phonology allow for a view that the letter used to spell the *–ki-* of Greek loans represented only a palatalized [k'], not an affricate.

The truth thus probably lies somewhere in-between a Greek-internal account and a Slavic-borrowing account. It perhaps strains credulity to suppose that Greek would have an etymologically unrelated suffix that matches the Slavic-derived one so exactly. It may well be, then, that even if there is a plausible Greek source, the Slavic suffix, which was not unknown in Greek, enhanced the adoption of the affricated variant of the *-ikion* suffix and allowed it to emerge and take hold in its affricated form. The chronology of the first actual appearances of *-itsa* in written materials accords with such a view, as it is found first in ordinary vocabulary in the 12th century poems of Theodoros Prodromos, e.g. *mikroteritzin* 'very small', and in personal names as early as the 9th century (*Boïditzēs*, in 838AD (Georgacas 1982: 39)).

Factors driving word formation change

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Historical word formation has been the target of scholarly interest for a long period of time. Much empirical work has been done on historical word formation systems (e.g. KLEIN et al. 2009 on Middle High German word formation) as well as on the development of individual word formation patterns (SCHERER 2005 on the history of German *-er* suffixation as in *Säng-er* 'singer').

As to the question of what exactly constitutes word formation change, MUNSKE (2002) compiles a broad range of phenomena, such as the birth or death of a word formation affix, formal change of an

affix (e.g. telescoping), or semantic change of a word formation pattern. SCHERER (2006) establishes in a systematic inquiry that word formation change largely boils down to changes in the productivity of individual word formation patterns. However, no comprehensive theory of word formation change has been developed so far. If we want to fully understand or even predict word formation change, we need to gain more insight on the factors that control word formation productivity.

In his monograph on morphological productivity, BAUER (2001: 60) provides a sketch of "factors connected with productivity" (including e.g. the transparency of a given pattern) that would ultimately lead to the increase of the type frequency. However, upon surveying relevant research (such as HAY & BAAYEN 2005), it becomes clear that the picture needs refining. For one thing, more factors have to be taken into account, for another their intricate relations must be examined and plotted.

In this talk, I will introduce a more elaborate model of the factors influencing word formation productivity. The model not only compiles the relevant factors, but also visualizes their complex interplay. At its core, the model features a three-step cycle: Productivity of a pattern leads to the increase of its type frequency; increased type frequency will strengthen its entrenchment, which in turn will reinforce productivity.[13] This cycle would predict ever-increasing productivity unless we determined dynamics to slow it down or stop it. Therefore, in addition to having organized the known factors of productivity, we will scrutinize how the picture changes diachronically.

An extensive study of adjectival word formation in the history of German conducted for this purpose shows how long term productivity of a pattern will eventually undermine itself: Suitable base words will be used up (as can be seen in the development of *-lich*, the cognate of English *-ly*), lexicalized formations may reduce the pattern's transparency, as will newly acquired functions. This situation is then likely to attract competing, typically younger and more explicit word formation means (for instance, the suffixation of *-ig* (cognate of English *-y*) is often replaced by patterns meaning 'X-shaped' or 'X-like').

Overall, this talk aims at advancing the understanding of productivity and its factors as well as illustrating some mechanisms of change by showcasing empirical data. Even so, many issues remain to be addressed. Developing a cross-linguistically valid theory of word formation change remains a goal for future collaborative research. In light of this, observations on diachronic developments in word formation systems of other languages are most welcome.

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[13] c.f. RIEHEMANNS (1998) notion of type based derivational morphology, which she later on (2001) connects to Construction Grammar morphology.

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Alignment change and case system in early medieval Italian Latin: evidence from Tuscan charters

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This paper discusses the semantic and syntactic factors that influence the case form of subject (nominative or accusative) in early medieval documentary Latin. The study is based on data from Late Latin Charter Treebank (LLCT), a 200,000-word corpus of Italian (Tuscan) private documents from between AD 714–869 (Korkiakangas & Passarotti 2011, Korkiakangas & Lassila 2013). Earlier studies (e.g. Sornicola 2008) prove that charter Latin, despite its formulaic nature, can be taken to reflect some developments of the spoken language.

Several scholars, such as La Fauci (1997), Cennamo (2001, 2009), and Rovai (2012), have suggested that, in Late Latin, one can identify traces of a transitory change from a nominative/accusative to an active/inactive alignment (and back to a nominative/accusative system in the Romance languages). The six-case system of Classical Latin was reduced, through a two- or three-case stage, to the neutral declension of the Romance languages. This change is thought to have affected also other areas of grammar, such as agreement and voice (e.g. Cennamo 2009). According to this theory, the nominative/accusative contrast was (re)semanticized in Late Latin so that the nominative came to encode all the Agent-like arguments and the accusative all the Patient-like arguments. As a consequence, the accusative encroached on the traditional domains of the nominative. The phenomenon has left its traces in a few substandard texts, as in (1), and is known as the 'extended accusative'.

(1) *medieta-te* *de ipsa terrola* *possede-at* *ipsa sancta* *De-i* *uertu-te*
half-ACC(OBJ) of the plot possess-3SG the holy God-GEN church-ACC(SBJ)
'this holy church of God possesses one half of the plot' (*CDL* 90, AD 747, Lucca)

The chronology and mechanisms of this development and especially its last stages prior to the neutralization of the two-case opposition are still not well understood. Although semantics was likely to be the driving force of the alignment change, certain syntactic factors may have interfered in it. Therefore, this study also seeks to discuss the role of the (relative and absolute) position of subject within the sentence and the position of its attributes inside subject NP (e.g. *ipsa sancta Dei uertute* in (1), where *uertute* is the head and the other words are its attributes). Sometimes the attributes form hierarchical chains with successive attributes modifying each other. The dependencies between the following variables will be assessed:

Dependent variable	Independent variable	Levels
case form of subject (nom. or acc.)	animacy/referentiality of subject	inanimate, animate common name, animate proper name
	verb type	transitive, unergative, unaccusative, passive
	subject position with respect to verb	linear word position (negative or positive integer)

case form of non-genitival attribute (nom. or acc.)	attribute position with respect to its head within subject NP	distance in dependency levels (positive integer)

The independent variables seem to correlate significantly with all those dependent variables on which they are tested. When the percentage distribution of the levels of each independent variable is counted, it is observed that: 1&2) The accusative subjects prefer low-animacy nouns and often occur with unaccusative verbs. 3) As far as syntax is concerned, the attributes located at the end of attribute chains seem to have slightly higher accusative rates than the attributes that are closer to the head of the subject NP. 4) Similarly, the immediate preverbal clausal position of subjects turns out to be related to high retention of nominative case.

The two first-mentioned dependencies suggest a limited presence of a semantically-based active/inactive case marking while the Romance-type neutral system and the Classical nominative/accusative aligned opposition are attested as well. The syntactic factors are more difficult to interpret. Drawing on Cennamo (2009) and Ledgeway (2012), one could relate the present findings to the fact that the accusative had become the default case in Late Latin, i.e. the case form that occurs in settings where there are no obvious criteria for selecting a particular case (cf. Adams 2013). I assume that the longer the distance between the subject and the verb or between the subject NP head and an attribute is, the more hesitation there is about the required case and the more easily the subject slips into default case, i.e. the accusative. On the other hand, the nominative prevails in the most canonical subject positions, i.e. the immediate preverbal position (in SVO languages) and the closest-to-head attribute position.

In conclusion, the observed presence of a semantic alignment seems to provide evidence in favour of the often questioned assumption (e.g. Sabatini 1965) that there still existed at least a reduced two-case opposition in (spoken) Late Latin (at least at the beginning of the time span of the LLCT). A semantically aligned case marking system that was essentially alien to Classical Latin, i.e. the language taught in schools, can hardly be interpreted as a learned relic, a term that is sometimes used to describe the case use of charter Latin (Sabatini 1965). Instead, the LLCT data show that a semantically-based active/inactive alignment system was a true property of early medieval Latin in Tuscany.

On the whole, the charters appear to provide a privileged overview on the last stages of the early medieval Latin case system.

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Head-initial constructions in a head-final language: the case of Basque nominal phrases

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This paper is concerned with the diachrony of several Basque head-initial nominal constructions: relative clauses (1), genitives (2) and phrases with the relational marker *-ko* (derived adjectival modifiers, (3)). While preposed modifiers predominate nowadays, in old texts postposed variants are widely attested too.

Traditionally considered an uninteresting calque from Romance syntax, these constructions never attracted much attention (postnominal relative clauses were first extensively treated in Oyharçabal 1987). More recently, morphological reconstruction has led Lakarra (1995, 2005, 2013) to argue that Proto-Basque was quite different from the modern language, for example that it was not head-final. Since then, postposed modifiers have been taken as additional evidence for that hypothesis. No detailed study on their diachrony have been conducted, though.

In this paper I will argue that head-initial constructions are most easily explained as (unsuccessful) innovations and that there are no good arguments for them being older than their head-final counterparts. In contrast to the traditional view, however, I will focus on language internal factors.

Borrowing, nonetheless, accounts well for the genitive: postnominal genitives are found uniquely in southern dialects and with very low frequency. Lexical possessors were very rarely placed after the noun. Most examples involve genitive pronouns and the most frequent example in the analysed corpus is *aita gurea* 'our father' (in prayer), which clearly suggests Romance influence.

Postposed *-ko* phrases, also mostly typical of the southern varieties, could have developed through analogy with adjectives, which in Basque follow the noun. I propose that *-ko* started to be used postnominally with lexicalized expressions that were semantically similar to adjectives, such as *zurezko* 'wooden' (form *zur-ez* wood-INS 'of wood') and subsequently spread to other phrases.

With regards to the postnominal relative clause, its relatively high frequency until the 19th century (in many texts over 25%, though there is a great deal of dialectal variation) and its presence in most old texts show that it was a well entrenched construction, rather than a minor stylistic variant. As for its origins, it is unlikely that it was modelled on the syntax of the surrounding languages, which employ a completely different relativization strategy (relative pronouns). It seems more plausible that it developed from appositive headless relative clauses, similar to (4a), through a reanalysis of the clausal boundaries, thus following a cross-linguistically common path described in Givón (2012): from parenthetical constructions to non-restrictive to embedded relative clauses.

Examples

(1) a. Prenominal relative clause
ardo-a edan du-en gizon-a
wine-DET drink AUX-COMP man-DET
'the man who drank wine'

b. Postnominal relative clause
gizon ardo-a edan du-en-a
man wine-DET drink AUX-COMP-DET
'the man who drank wine'

(2) a. Prenominal genitive
aita gure-a
father our-DET
'our father'

b. Postnominal genitive
gure aita
our father
'our father'

(3) a. Prenominal *-ko* phrase
zeru-ko jaun-a
heaven-ko lord-DET
'heavenly lord'

b. Postnominal *-ko* phrase
jaun zeru-ko-a
lord heaven-ko-DET
'our father'

(4) a. Appositive relative clause
[jaun-a] [[gauza guzi-a-k dakizki-en]-a]
lord-DET thing all-DET-PL know-REL-DET
'the lord who knows all things'

b. Postnominal relative clause
[jaun [gauza guzi-a-k dakizki-en]]-a
lord thing all-DET-PL know-REL-DET
'the lord who knows all things'

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The word accent in Greek-Aryan and Balto-Slavic

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0. The word accent in Proto-Indo-European (PIE) remains a riddle from the beginning of this science. On the one hand, the quantitative ablaut suggests that the PIE language have had the ex-piratory stress; the unstressed vowel must be reduced and syncopated (syncope is an extreme de-gree of reduction). On the other hand, the full developed system of tones in Balto-Slavic leads to the reconstruction of pitch, musical accent.

0.1. Jerzy Kuryłowicz (1952) considered Greek-Aryan system of accentuation with its developed system of ablaut as an immediate ancestor of PIE, and treated the Balto-Slavic tones as a result of secondary development; controversially, Vladimir A. Dybo (1981; 2000) proceeds from the priority of the tonal system of PIE accent; he finds the correspondences to the most Balto-Slavic features in Italic, Celtic, Germanic (cf. also Tsimmerling 20074). Alexander M. Lubotsky (1988) has proposed his own system of tonal reconstruction in Old Indic and Greek.

1. Let us consider two several scenarios of PIE accent system development. In first case, it was tonal, with secondary transformation into the expiratory system. I.e. new accent shifts, as old ones, must lead to the reduction and syncope. But such laws as Fortunatov-Saussure law, Šach-matov law have not such results. In second case, the old accent formed the quantitative ablaut what remains as a separate language u nit; then the expiratory character of stress is weakened. Such is tonal accent Greek and Old Indic, remaining the basic features and in many cases the po-sition of old stress. The Balto-Slavic accent has lost the primary positions of accent but kept ab-laut corresponding to Greek-Aryan one.

2. There is also the important correspondence between Greek-Aryan and Balto-Slavic accentua-tion: The oxytone nouns correspond to the nouns with mobile accent; relatively the barytone nouns correspond to the nouns with immobile accent. There is a great literature discussing this question (Olander 2009).

2.1. In order to compare Greek-Aryan and Balto-Slavic accentuation let us say some words about internal derivation. I mean that the basis of this phenomenon is so-called type ϕ\ρ ‘thief’— ϕορ®φ ‘carrying’ —ϕ®ροφ ‘burden’, a predecessor of the type τ®μοφ — τομ®φ [Krasukhin 2004]. In other words, the primary athematic noun has the stress in the strong cases on the root vowel; other vowels are reduced. Such noun mean an agent (as a basic, stable feature of its deno-tate), action, instrument. The shift of the stress on the right leads to the restitution of the end vowel, reduction or syncope of root vowel; the thematic oxytone noun denotes becomes an ad-jective, denotes the temporary agent, or patient. The recession of accent back on the root vowel forms the new thematic nouns with abstract/ resultative meaning.

2.2 In Lithuanian the root nouns are substituted by *–i-* and *–ė-* nouns: Lat. *anas* — Lith. *ántis* (1[14]) ‘duck’ (and OInd. oxytone derivate *ātí́* ‘water-fowl’), OInd. *dvár* — Lit. *dùrys* (2; pl. tantum)

[14] The sign means the accent paradigm.

‘door’ (лат. *foris* — derivate with *–i-*); Greek θ≈ρ (эол. ϕ≈ρ) — лит. *žvėrìs* ‘wild animal’ (3); Greek. χ≈ν, χην®φ, OEngl. *gōs,* OHG. *gans* ─ Lith. *žąsìs* (4) ‘goose’ (cf. oxytone OInd *haṁsá*), OInd *púr* ‘city, fortress’ (latest *puri*) — Lith. *pilìs* (4). Also: *žvãkė* (2) ‘candle’ — Lat. *fax* ‘torch’, Greek ϕ⏌ψ: ϕαοφ (Hes.) ‘light’, *žẽmė* (2) ‘earth’ — Greek χθ⏌ν, OInd. *kṣáṁ* (but also Slav. *zemlia* with the suffix **-iā-*). I.e., these nouns denoting the animated beings tend to have mobile accent, and the nouns denoting abstract concepts have often the immobile accent.

2.3. Also all the Lithuanian adjectives have mobile accent; of them some are derived from immobile substantives. In some cases the change of paradigm is a main way of derivation: *žẽmė* — *žẽmas* (4) ‘humble’. The correlation of the adjective **(d^h)ĝ^{h}emós* with the substantive **(d^h)ĝ^{h}ém-s* is the same as of ϕορ®φ — ϕ⏌ρ, OInd. *rucá* ‘bright’(adj.) — *rúc* ‘light’(subst.). The comparison of Lith. *tìltas* (1) ‘bridge’ with Greek τλητ®φ ‘carried, borne’ and Lat. (*st*)*lātus* ‘wide’ gives important information. These nouns are passive participles with stressed suffix **–tó-*. The Lithuanian substantive represents a barytone stem: **tĺ̥h$_2$to-*; i.e. it is formed by accent retraction, as Greek κ∨ρτοφ ‘crookedness’ from κυρτ®φ ‘crooked’, π®τοφ ‘drinking-bout’ from ποτ®φ ‘drunken’. In other words, in Lithuanian there are evident traces of inner derivation with the shift of accent.

3. The derivation of substantives from adjectives is also connected with accent changes:

Adjectives in *-a-* : *jáunas* (3) ‘young’ — *jaũnis* (2) ‘young people’, *jaunkáitis* (cf. *yúvan* ‘young’, *yuvaśá* < **iu-n̥-kó-*, лат. *iuvenis*, *iuvencus* < **iu-n̥-kó-*, **iunus*[15]); *sẽnas* (4) ‘old’ — *sẽnis* (2) ‘old man’ (ср. лат. *senex* < **sen-eH-s*; Gen. *senis* < **sen-H-éis*, suggesting a Nom **sén-is = sẽnis*; Greek. □νοφ, OInd. *sána,* but oxytone *sanáj* ‘archaic’, *sanā́d* ‘for a long time’); *júodas* (3) ‘black’ — *júodis* (1) ‘black animal’ – *juõdis* (2) ‘blackness’; *raũdas* (4) ‘red’ — *raũdis* (2) I ‘red animal’, II ‘redness’, *rùdas* (4) ‘brown’ — *rùdis* (2) ‘a people or animal with red-brown color’; *báltas* (3) ‘white’ — *báltis* (1) ‘white animal’, *bãltis* (2) ‘whiteness’, *baĨtė* (2) ‘white color’; *pìlkas* (4) ‘grey’ — *pìlkis* (1) ‘grey animal’, *piĨlkis* (2) ‘greyness’ *draũgas* (4) ‘friend’ — *draugẽ* (4) ‘friendship’ (the same AP), *draũgė* (2) ‘she-friend’, *saũsas* (4) ‘dry’ — *saũsis* (2) ‘January’ (‘dry month’); *gẽras* (4) ‘good’ — *gẽris* (2) ‘goodness’, *pìlnas* (3) ‘full’ – *piĨnis* (2) ‘fullness’, *ìlgas* ‘long’ — *ilĨgis* ‘longitude’, *tvìrtas* (4) ‘hard’ — *tvir̃tis* (2) ‘fortress’.

3.1. Adjectives in *–u-* : *sótus* (3) ‘satisfied’ — *sótis* (1) ‘satiety’, *kartùs* (3) ‘bitter’ — *kar̃tis* (2) ‘bitterness’; *saldùs* (4) ‘sweet’ — *saĨdė* (2) ‘malt kasha’; *glaudùs* (4) ‘narrow’ — *glaũdes* (2; pl.tant) ‘panties’.

4. Therefore we can suggest that the accent mobility had in Proto-Baltic the function similar with Greek-Aryan: it distinguished substantives and adjectives, concrete and abstract nouns.

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[15] This adjective can be restituted by analogy: *pisum* ‘bean’ – *Piso* (NPr.), *nasum* ‘nose’ – *Naso*, *catulus* ‘pupil’ (diminutive from **catus*) – *Cato*. Therefore the name *Iuno* suggests an adjective **iunus*.

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Many faces of the Indo-European causative, or How causatives try to escape from their job: Evidence from Vedic and beyond

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Old Indo-Aryan (Early Vedic) exhibits an enormous variety of types of morphological causative oppositions. This remarkable feature of the Indo-Aryan verb has been the subject of several pioneering studies of Prof. Roman Lazzeroni and deserves further research. The rich Vedic system of morphological causatives includes (i) the most regular and productive causative marker in the present system, the suffix ***-(p)áya-*** attached to the full or lengthened grade of the root (as opposed to the *-áya-* presents with the short grade of the root, which are mostly intransitive), cf. *v□dh-* 'grow, increase' - *vardháyati* 'makes grow, increases', *cit-* 'appear, perceive' - *cetáyati* 'shows (= makes appear), makes perceive' (~ *citáyati* 'appears'); (ii) the pure diathesis (active/middle) opposition (**middle: intransitive ~ active: transitive**) of the type *námate* 'bends' (intr.) ~ *námati* (/*-te*) 'bends' (tr.); *svádate* 'is sweet' ~ *svádati* 'makes sweet'. (iii) The unproductive present causatives with **nasal affixes**, i.e. suffixes *-nó-*/*-nu-* (pres. class V), *-n□-*/*-nī-* (pres. class IX) or infix *-ná-*/*-n-* (pres. class VII), are typically opposed to the intransitive (anticausative) class IV (with the suffix *´-ya-*) or class I present; cf. *i-* 'go, send': *éti* (pres. class II) 'goes' ~ *inóti*, *ínvati* (pres. V and its thematicization) 'sends'; *kṣi-* 'perish, destroy': *kṣ□yate* 'dies, perishes' (pres. IV) ~ *kṣiṇ□ti* (pres. class IX) 'destroys'; *pū-* 'purify': *pávate* 'becomes clean, purifies oneself' (pres. class I) ~ *pun□ti* (pres. class IX) 'purifies'. (iv) **Reduplicated** causatives left only few traces in the system of present (pres. class III, cf. *yúcchati* 'keeps away' ~ *yuyóti* 'makes keep away'), but survives in reduplicated aorists (cf. *v□dh* 'grow, increase' - *ávīv□dhat* 'has made grow'), historically going back to imperfects of reduplicated presents. (v) Another rare morphological type is instantiated by present **class VI** (= zero grade root thematic presents) causatives, cf. *tárati* (pres. class I) 'crosses' ~ *tiráti* (pres. class VI) 'passes over, rescues'.

This amazing system must have preserved traces of virtually all Proto-Indo-European morphological causatives, partly attested also in other branches of Indo-European (cf. reflexes of *-eie/o-* causatives in Slavic and Germanic or nasal causatives in Anatolian). Most importantly, Old Indo-Aryan also preserves many traces of the original polyfunctionality of the Indo-European causatives:

none of these types is dedicated to the causative function alone. Thus, the suffix *-áya-* is also used (with with the short grade of the root) to form Indo-European "iteratives" (or, to be more precise, atelic verbs) of the type *patáyati* 'flies chaotically, in different directions'; reduplicated formations may also have atelic meaning (cf. *bhárati* 'brings' ~ *bíbharti* 'carries'). Presents with nasal affixes can be used non-causatively when thematicized (a remarkable feature mentioned also by Prof. R. Lazzeroni), while *-áya*-causatives show no causative meaning when derived from transitive verbs in early Vedic. All these features testify to the archaic character of the Vedic causatives. This, in turn, can be considered as evidence for a very unstable character of the Proto-Indo-European causative system, consisting of several potentially productive formations, which results in a variety of its reflexes in different Indo-European branches.

Classes of motion verbs in Old English. A role and reference grammar analysis

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The aim of this paper is to apply the system of lexical decomposition of Role and Reference Grammar (henceforth RRG) to Old English and, more specifically, to classify motion verbs on the basis of the verbal classes distinguished by Van Valin and LaPolla (1997) and enlarged in subsequent work by Van Valin (2005), Pavey (2010), Cortés Rodríguez (2014) and Van Valin (2014). The verbal classes and the system of lexical representation of RRG is based on the features that give rise to the following *Aktionsart* types:

a. State:	[+ static], [– dynamic], [– telic], [– punctual]
b. Activity:	[– static], [+ dynamic], [– telic], [– punctual]
c. Achievement:	[– static], [– dynamic], [+ telic], [+ punctual]
d. Semelfactive:	[– static], [± dynamic], [– telic], [+ punctual]
e. Accomplishment:	[– static], [– dynamic], [+ telic], [– punctual]
f. Active accomplishment:	[– static], [+ dynamic], [+ telic], [– punctual]

The inventory of motion verbs will be drawn from Weman (1967) and Ogura (2002). Weman (1967) focuses on *faran, fēran, gewītan, leoran, gangan, gān, stæppan, wadan, liðan, scriðan, wendan, wandrian, hweorfan, wealcan* and *sceacan*, while Ogura (2002) discusses *cuman, gan, (ge)gangan, faran, gewitan, (ge)hweorfan, (ge)wendan* and *turnian*. The data will be retrieved from the *Dictionary of Old English Corpus* and from the lexical database of Old English *Nerthus*, although special attention will be paid to the verbs beginning with the letters A-G, the ones already published by the *Dictionary of Old English* Project. Conclusions are expected not only on the different *Aktionsart* types found in the Old English texts but also on the general applicability of the system of lexical decomposition of RRG to Old English.

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Advances in the (internal) reconstruction of Proto-Basque: typological comparison and the grammaticalization theory

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Since the 60's, the best-understood aspect of Proto-Basque was its phonology, due to L. Michelena's *Fonética História Vasca* (1977 [1961]), following A. Martinet's essay on occlusives (1950). This has been the standard reconstruction, even for R. L. Trask (1997; except for the phonemic status of the voiceless glottal fricative), and has provided a considerable amount of etimologies. Morphology and syntax, on the contrary, have been much less studied.

It has long been assumed that "Basque is a virtually perfect SOV language" (Trask 1998: 320) due to its modern structural traits, which include ergative alignment, postpositions, LexV-AuxV order, preposed modifiers, etc. Recently, however, in an attempt to reach previous stages of Basque by internal reconstruction, scholars have pointed out some typological mismatches and suggested that Basque has undergone a typological drift of great diachronic depth (cf. Lakarra 1995, 2005; but already in Trask 1977, Gómez 1994, Gómez & Sainz 1995).

When working with this language isolate, historical linguists have to face two main problems. On the one hand, Basque dialects have been in an uninterrupted contact situation (far from what have

been posed for "classical" families like IE, austronesian, etc.). On the other hand, the results of the internal reconstruction and dialectal comparison can be classified into two groups: (1) traits that can be postulated as belonging to Late Proto-Basque (ca. 200 BCE, just before the arrival of the Romans) or to Common Basque (the stage the modern dialects derived from, before the 1st split ca. 8th c.; cf. Michelena 1981, Lakarra 2011), and (2) those that are difficult to demonstrate with this method.

In order to develop a deeper reconstruction, we need the aid of a cross-linguistic theoretical framework. The grammaticalization theory and historical and typological works (Bybee et al. 1994, Heine & Kuteva 2002, among others), along with a well-established root theory (Lakarra 1995; cf. among others Benveniste 1935 on IE, Bakrò-Nagy 1992 on Uralic, Sagart 1999 on Old Chinese), are the best support to our proposals. They give a unified explanation for changes that are attested or securely reconstructed in many (genetically unrelated) languages and which affect different components of language (phonology, morphosyntax, semantics, etc.), thus both delimiting possible evolutionary paths and suggesting lines of investigation that would otherwise be neglected in a purely internal reconstruction. In this manner, apparently independent phenomena may also be pieced together (cf. Stassen's [2000] classification of *and*-languages and *with*-languages and its typological implications).

This methodology has turned out to be a very fruitful and promising way to analyse the prehistory of the Basque language (cf. Lakarra 2005, 2008, 2013a, 2013b, and Ariztimuño 2013, 2014, in-progress), as a holistic counterpart of Michelena's systematic analysis of loanwords. The results obtained so far —by means of etymologies that fit the standard diachronic processes and laws— show a dramatically different typology: isolating type, monosyllabic roots, reduplications, prepositions, very restricted V and Adj categories, possibly employing serial verb constructions, etc.

(BE)COME (**din*):
- ablative case suffix
- adjectivizer
- potential~future marker

FINISH (**den*):
- completive > perfective prefix
- plural agreement suffix

GIVE (**nin*):
- ditransitive auxiliary verb
- dative-marker on verb
- dative case suffix

LIE, BE (**zan*):
- locative > abundantial derivational suffix
- sociative > instrumental case suffix
- plural agreement suffix

SAY (**san*~**so*):
- comparative suffix

SIT (**dar*):
- imperfective prefix
- 3rd p. sg. copula
- locative suffix

TAKE/PUT (**don* > **lon*):
- causative prefix
- completive suffix
- modal auxiliary

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The Diachrony of Pleonastic Object Pronouns in Greek: Translation Effects or Language Contact and the Greek Septuagint

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This paper examines the hypothesis that the Greek Septuagint (which includes both Hebrew texts translated into Koiné Greek and texts written in Koiné Greek) reflects an ongoing change in verbal transitivity. The study focuses on pleonastic pronouns in contrast to referential null objects. The traditional literature has posited these pleonastic object pronouns in the Septuagint as the result of contact between the Greek language and other languages, primarily Hebrew. The unavailability of referential null objects in later (post-Koiné) Greek is also considered to have been affected by Hebrew (see, for instance, Moulton & Turner 1963). Referential null objects are allowed in Classical Greek but become restricted in Koiné Greek (cf. 1). This restriction appears to conform to the Biblical Hebrew characteristic of using pronominal suffixes instead of null objects (Janse 2002; George 2010). Similar to the tendency to use pleonastic pronouns, cognate objects are frequent in the Septuagint (cf. 2). According to Moulton & Turner (1963), "this follows [again] a Semitic principle."

(1) *kaì* *anéstē* *Kain* *epì* *Abel* *tòn* *adelphòn* *autoû*
and rose-up.3SG Cain.NOM against Abel.ACC ART.ACC brother.ACC 3SG.GEN
kaì *apékteinen* ***autón***.
and killed.3SG 3SG.ACC
'And Cain rose up against Abel, his brother, and killed him.' (Ge.4:8)

(2) ***ploutḗsei*** ***ploûton*** *mégan.*
enrich.FUT.3SG richness.ACC big.ACC
'[...] (he) will become much richer (than all the others).' (Dan.11:2)

A corpus study shows an important increase in the frequency of 3rd-person, but not 1st- and 2nd-person, personal pronouns in the Septuagint. 3rd-person clitics encode values of

uninterpretable features only, whereas 1st- and 2nd-person clitics carry an interpretable feature of person (Manzini & Savoia 1998; Tsimpli & Mastropavlou 2007). Moreover, pronouns or even nouns and adverbs with semantic features are preferred and transferred in the Septuagint from Hebrew, to be used in place of elements with uninterpretable features. For instance, a demonstrative adverb (*ekeî, ekeîthen*) is used after a relative pronoun or a similar phrase to repeat the previously mentioned DP (cf. 3).

(3) *epì* *tôn* *oikiôn* *en* *haîs* *humeîs* *este* ***ekeî***
on ART.GEN.PL house.GEN.PL.F in REL.DAT.PL.F NOM.2PL be.2PL there
'[The blood shall be a sign for you] on the houses where you are (there).' (Ex.12:13)

In contrast to the traditional view set forth in the literature, we will argue against a direct relationship between the characteristics of transfer from Hebrew in the Greek Septuagint and the relevant change; we propose instead a different correlation between the change in later Greek and the translation language under examination. We will base our discussion of the proposed relationship on principles of change (the Feature Economy Principle; van Gelderen 2008) and on processes of language transfer as observed in L2 acquisition or L1 attrition according to the Interpretability Hypothesis (Tsimpli 2003).

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Effecting a change: perfect and middle in some Indo-European languages

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The so-called "stative" endings do not belong to a distinct voice differing from the perfect and the middle; rather, they are the archaic middle endings.

The contrast between middle and perfect is nothing but the contrast between the representation of a state resulting from a process, on the one hand, and a dynamic representation of a process causing a resultant state, on the other. Both the perfect and the middle consist of unaccusative constructions whereby the subject, corresponding to the object of the transitive counterparts, is represented as an inactive participant, and as the locus of the process itself (BECOME state, according to Dowty). At this stage, the perfect and the middle were opposed to the active: [active] vs. [middle : perfect]. The morphological coding of Tense first applied to processes, and not to states; hence, it applied to the active and middle before it applied to the perfect. Therefore, the middle passed from the perfect system to the present/aorist system: [active : middle] vs. [perfect].

The idea that the middle is ancient in the perfect system, but recent in the present/aorist system, also accounts for the well-known fact that the ancient middle endings (i.e., the "stative" endings) mixed with the active endings. Since the direction of the change must have followed the markedness gradient put forward by Andersen 2001, a consequence is that the ancient endings have been kept in the injunctive, in the historical tenses and in the optative. Furthermore, it is likely that media tantum do not represent the prototype of the category. They should represent, rather, the prototypes of the values attributed to the perfect during its expansion as a natural category, starting from a nucleus of unaccusative verbs.

Locative cases in Northern Samoyedic languages. A localistic view

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Northern Samoyedic languages (NSm) (< Samoyedic < Uralic) comprise five languages, Nganasan, Tundra Enets, Forest Enets, Tundra Nenets, Forest Nenets, spoken mostly in the northern Russia from the Murmansk region in the West to the Taimyr Peninsula in the East. The Taimyr Peninsula is the homeland of both Enets, Nganasans, and the eastern groups of Tundra Nenets. All NSm are endangered. Only Nenets languages have speakers among children while Nganasan and both Enets are moribund languages.

The NSm are a result of gradual divergence (started ab. 500 A.D.) of the protolanguage *via* a dialect continuum, so that the borders of linguistic territories always were in touch. NSm have considerable stock of lexics of common origin and numerous structural similarities.

NSm have head-final word order and are basically agglutinative, with complicated morphophonology. In NSm there are four locative cases, Locative (LOC), Ablative (ABL), Lative (LAT)[16], and Prolative (PROL). Spatial dimensions and relations in more abstract domains can also be expressed with postpositional phrases. Postpositions are inflected in the locative cases and govern the genitive of nouns.

Proto-Samoyedic language is supposed to have the following locative case markers (in SG).

Locative: **-kə-nå / *-kə-nä*
Ablative: **-kə-tə*
Lative: **-kə-*
Prolative: **-mə-nå / *-mə-nä*
(Janhunen 1998)

All these suffixes are identifiable in the modern NSm except Nganasan, in which the LAT and the fist syllable of the LOC and is *–ntə-*. All the markers have a special plural form accept PROL, which is the same for PL while the noun stem changes for the plural genitive stem. Thus, it can be judged that the Prolative developed into the case marker from the postposition later than the other locative cases.

1. Nganasan
   a) *kolïδï-gətï; Əŋkahu bigaj-mənï*
   fish-HABIT.3SG PN river-ROL
   He used to fish along the river of Pyasina
   b) PL *bikau”- mənï* river.GEN.PROL ‘along the rivers’
2. Tundra Nenets
ḿa”-m°na tent-PROL ‘along the tent’, *ḿado”m°na* tent.GEN.PL-PROL ‘along the tents’

The NSm locative cases take the following semantic roles

LOC	location	time	accompaniment	instrument	Force	
LAT	goal	time	Recipient	beneficiary	agent*	patient*
ABL	source	time	Causer	anti-recipient	Stimulus	
PROL	path	time (span)	Manner	Measure	Stimulus	

* in certain languages

According to localistic analysis, spatial expressions serve as structural templates for other expressions (see Lyons 1977: 718 ff. and references there; Stassen 1995: 36-37). In line with localism, I suggest that in NSm, relations and metaphors grounded in spatial domain can explain

[16] In some NSm this case is called Dative. I will explain below why I don’t use this name.

the use of locative cases in all the other domains and that locative cases are connected to verbal categories. E.g., ABL and LAT are connected to the perfective aspect and LOC to the imperfective aspect. Certain verbs of striving subcategorize for the Lative argument. In certain information-structural conditions the Plural form of the LAT can be used for grammatical subject and object (Tundra Nenets).

Symmetrical opposition in the use of the Ablative and Lative in the spatial domain sometimes extends to LAT/ABL variation. Some verbs allow both ABL and LAT[17]. For instance 'find' is possible with ABL and in this case the ABL indicates the source location from which the patient becomes sensorily available for the agent (3). On the other hand the location of the patient can be expressed in LAT as a goal and a final point of the trajector's activity (4).

Nganasan

3. *Kunit´ekü̈ə-ðə tənə ŋəð´i''ə-m.*
somewhere-ABL you find.PFV-1SG
I found you somewhere.

4. *Houru*	*ńüə-mtï*	*hünśünśəəd´əə*	*bəlouka-ŋgu*	*kund´i*
PN	child-ACC.3SG	Dilapidated	winter.house-DIM.GEN	inside.LAT

ŋəð´i''ə, kund^{u}a-tu-ndə-tu.
find.PFV.3SG sleep-VN-LAT-3SG
Houru found her child sleeping in an old winter-house.

My objective is to explore semantic roles of the locative cases and aspect-tense categories in their relationships to the spatial domain.

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[17] The alternation between the 'to' case and 'from' case and sensitivity of the Finnish cases to an internal dynamics of event have been studied by Tuomas Huumo (e.g. 2010, 2006). In their use of dynamic locative cases NSms are very close to Finnish.

The semantic development of MANAGE verbs in Germanic languages & what it implies for Subjectification Theory

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Discussing evidence from four West Germanic languages, namely Dutch, English, German and Luxembourgish, our paper describes a hitherto little noticed (set of) pathway(s) of semantic change. The changes have affected verbs, or verbal constructions, which (besides other semantic variants) currently refer to actions successfully performed in spite of a 'hindrance', i.e. their meanings "suggest[…] that the result is achieved despite resistance" (McIntyre 2005, 402). Among these are Dutch *krijgen* 'get, manage', English *deal with, cope with, manage,* German *kriegen* 'get, manage' and Luxembourgish *kréien* 'get, manage'. Before their meanings changed, they typically referred to specific interactions among animate, and typically human, participants. One of them figured as syntactic subject, and the other one either as direct object, or as modifier of a prepositional phrase. While specifying type and manner of the interactions they indicated, the verbs usually left their outcome unspecified. Thus, *cope with* or intransitive *kriegen* signified physical, antagonistic interactions among two human participants, as in (1) and (2).

(1) *He wolde nevyr cope whithe no man.*
He would never fight with any man.
(W. Gregory *Chron*, 1476, OED, s.v. *cope*)

(2) *Krighet twene edder mer lude umme en erve,* [...].
GET two or more people for a heritage [...].
'(If) two or more persons are battling for a heritage'
(*Das Stadtrecht von Goslar*, 1350)

In subsequent developments, the range of external arguments taken by the verbs widened to include objects or abstracts concepts, as in (3), representable not only by nouns but also by clausal constituents (4, 5).

(3) *He who must cope with treachery and wrong* [...]
(*North American Review*, 1829, COCA)

(4) *Ik kann dat nêt to faten krigen*
I can that not to crasp get
'I cannot get to understand that'
(*Niedersächsisches Wörterbuch* 1965ff., vol. 7: 924)

(5) *Anderson still hadn't found a good way to cope with being a firsthand witness to that kind of death and destruction.*
(Karpyshyn, Drew. 2007 *Mass Effect: Revelation.* COCA)

At the same time, subject positions kept being typically occupied by nouns with human referents. As the asymmetry between internal vs. external arguments grew, the verbs typically underwent two types of semantic developments: (a) they bleached and ceased to specify the type or manner of interaction, and (b) they came to signify outcomes that are positive from the points-of-view of the agents in subject position. Some verbs came to convey 'perfective' or 'resultative' meanings, as in (6) and (7).

(6) *When he had been called up, he'd <u>managed</u> to desert.*
(M. Moorcock *Chinese Agent*, 1970, OED, s.v. *manage*)

(7)	*Uiuiui,*	*ich*	*hoffe*	*Micha*	*<u>kriegt</u>*	*das*	*repariert.*
	Uiuiui,	I	hope	Micha	gets	that	repaired.

(www.elternforen.com/threads/der-chat-ist-tot.33229/page-2, 29/01/2015)

Our presentation has a dual agenda. Empirically, we demonstrate that the developments do indeed constitute a likely pathway of semantic change: (a) they affect verbs from different languages in similar ways, (b) there is a strong semantic family resemblance among the affected verbs, and (c) the changes are towards a common point of attraction. We produce evidence from diachronic dictionaries such as the *Oxford English Dictionary*, the *Deutsches Wörterbuch*, from corpora such as the *Penn-Helsinki Parsed Corpora of Middle and Early Modern English*, the *Corpus of Historical American English*, the *Bonner Frühneuhochdeutsch Korpus*, and from other historical data.

On a theoretical level, we discuss how the pathway of changes we identify can be accounted for in the framework of Subjectification Theory (see e.g. Langacker 1990, Traugott 2010). While we regard this as possible, we make two proposals which, we think, may deepen our understanding of the processes underlying subjectification in semantic change.

First, we argue that changes by which verbal meaning become more subjective in the sense of indicating speaker attitudes are likely to be paralleled by changes in the relation between verb meanings and syntactic subjects. We propose that this is due to associations between speaking subjects and syntactic subjects, reflected in the 'subject hierarchy' (see e.g. Dik 1997: 37), according to which the typical syntactic subject is 1st person. – Secondly, we highlight the roles of listeners in subjectification processes, and argue that subjectification is not only be driven by the speakers' needs to posit themselves as 'subjects' (cf. Benveniste 1958: 268), facilitating the "expression of [… themselves] and [… their] own attitudes and beliefs" (Lyons 1982: 102), but as least as much by listeners' interest in "reading speakers' minds" (see Krebs & Dawkins 1984). For the purpose of 'mind-reading' they rely on assumptions grounded in the 'theory-of-mind', or 'intentional stance', by which humans construct one another as agents with goals and desires, taking a partial (self-interested) view of the world, and interpreting and evaluating it from subjective perspectives (see Dennett 1987).

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Instances of "degrammatization" and "relicization" in the prehistory of the Latin verb system

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Research around the (pre)history of the Latin verb system has seen notable progress in the last two decades (e.g. Sihler 1995, Meiser 1998, 2003), as the increasingly improving methods and theory of general linguistics (especially linguistic typology) and historical linguistics have offered new viewpoints, descriptive tools and explanatory models. New results from Indo-European studies have necessitated revising some of the earlier views (see e.g. Kurzová 1993, Weiss 2011). These studies focus somewhat exclusively on the creation and development of new forms and categories, and to PIE is often assigned the role of a "storage bin" containing a colourful set of forms and categories, some of which continue their existence in daughter languages in one form or another. The basic research in historical linguistics is (and must be) firmly rooted in historical phonology, while newer studies continuously take note of more broader aspects, focussing not only on individual forms and categories but also on functions and systems.

It is certainly an obvious fact that the verbal categories of Latin's ancestors do not correspond one-to-one to those of Latin. According to Gerhard Meiser's *Hereditätsprinzip*, the exceptions to an expected, regular development of linguistic entities must be thoroughly explicated (Meiser 2003: 4–5). This is usually taken to mean that it is precisely the novel categories (and the novel categories only) whose development must be discussed and explained. However, in this paper I will pay attention to the "other side of the coin". It namely is conversely true that not all forms and categories of the parent language were passed down to Latin: some disappeared completely or were merged with others, while others survived individually as *relic*

forms (the existence of which has long since been noted). If a category seems to have disappeared without any formal remains (e.g. the PIE imperfect), it is simply disregarded. As far as I know, historical linguistics has thus far had neither proper theory nor necessary concepts with which to describe and explain the processes of disappearing linguistic entities. Considering the system-like nature of language, I find it necessary, for the sake of completeness and descriptive accuracy, to develop a theory for the proper treatment of these phenomena.

My treatment of the subject necessitates treating PIE not as a mere methodologically derived grammar fragment, but as a proper language system, complete with morphological, morphosyntactic and semantic-syntactic categories. I think this view is permitted to a limited extent, as long as the reconstructions are not given the same ontological status as similar entities in attested languages. My starting point is what is often considered to be the "Late-PIE" verb system, based on the traditional Greco-Aryan model. I will trace the development through Proto-Italic into Archaic and Classical Latin. In the confines of this paper I will not discuss non-finite verb forms nor the development of Latin conjugations.

First, I will discuss the decay and disappearance of grammatical structures. I will call such processes *degrammatization*.[18] *Lexicalization* and *morphologization* are related concepts, which in some cases overlap with degrammatization, but in my treatment degrammatization means the mere disappearance of a structure from its original place in the grammar, regardless of what subsequently happens to that structure in other areas of grammar or language system. Closely related are also the concepts of *innovation* and *renovation* (see Lehmann 2002: 17–19). Second, I will discuss the occasional formal residue of degrammatization. This involves the appearance of linguistics *relics*, which may be entities of whatever size and function (morphemes, word-forms, irregular paradigms, etc.). The process of an entity being turned into a relic is called *relicization*. I will propose a set of parameters by which relics can be identified and classified. For instance, the future paradigm of III and IV conjugations will be presented as a grammaticalized relic. An attempt will be made to formulate general principles of relicization, and explore the systemwide influence of relicization on the development of grammatical categories.

I will show that the prehistory of the Latin verb system involves not only the appearance of new categories and the merger of old ones but also the total disappearance of some categories and relicization of others. Accounting for these phenomena is not only significant from the point of view of Latin historical linguistics but also of interest to general linguistics, Indo-European studies, and the theory of historical and comparative linguistics.

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[18] My terminology is based on grammaticalization studies. As degrammatization can be seen as a counter-phenomenon to grammaticalization, *degrammaticalization* would be a more logical term. However, that term has already been established to mean an altogether different phenomenon (see Norde 2009).

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Morphosyntactic variation in the expression of conditional semantics in earlier English

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This paper explores the historical development of conditionality in English. Throughout the history of English, conditionals are most often expressed using the structure also found in correlative constructions introduced by *þa* (or *þonne* or *when*) as seen in (1).

(1) þa he þa to him cwom, þa wæs he Forht geworden.
then he then to him came, then was he fearful become
'When he then came to him, he had become fearful.'
(Bede_2:9.128.17.1222)

Van Kemenade and Los (2006) argue that in these correlative constructions the subclause, introduced by a conjunction, serves to locate the event in time/discourse, while the second clause – a V2 clause introduced by the resumptive adverb *þa* or *þonne* – relates the follow-up event. This correlative syntax is also found in *if*-conditionals, such as the Old English example with *gif* in (2). The *if*-clause protasis in this type of example provides a possible or hypothetical state of affairs under which the main clause apodosis, introduced by the resumptive adverb *þonne* (or *then* in Present-day English), is true (Quirk, Greenbaum, Leech, & Svartvik, 1985; Traugott, 1992).

Gif he ðonne sie idæges dead, ðonne sitte sio Scyld on him.
If he then is on.the.same.day dead, then set the Guilt on him

(2) ‘If he should be dead that same day, the guilt rests on him.’
(LawAfEl:17.44)

The use of conditionals utilising this structure is very frequent in earlier English: *if*-conditionals are by far the largest group expressing correlative syntax until late Middle English (see Figure 1). Alternative expressions of conditionality include at the very least so-called Verb-First conditionals (Mitchell, 1985; Van den Nest, 2010 for Old English), as in example (3) and the use of imperatives (Fischer, 1992; Mitchell, 1985), as in example (4) (example from Mitchell (1985, p. 849)).

(3) [...] wistest þu þæt ic wat, þas Word þu ne cwæde.
[...] know you that I know, that Word you not say
‘[...] Had you known what I know, you would not say that word.’
(ÆLS_[Thomas]:312.7732)

(4) Berað eowre byrðenna gemænelice Betwux iow, ðonne gefylle ge Godes æ
Bear your burdens mutually between you, then fulfil you God's law
‘Bear your burdens in common amongst yourselves, then will you fulfil God's law.’
(CP:395.34)

The above raises the question what exactly the scope of morphosyntactic variation is in expressing the condition-result semantics of conditionals. To answer this question, this paper will explore the formal expressions of conditionality throughout the history of English and the division of labour between the various constructions. It will investigate the relation between the different means of expressing (possible and hypothetical) conditionality and the effects of changes in the English morphosyntax on the expression of conditionality. Using a qualitative and quantitative corpus-based approach, mining the YCOE, PPCME2 and PPCEME corpora, I expect to find preferences for and changes in both structure and discourse function. The following features are expected to have an effect on the (structural) expression of conditionality: the mood of the clause, the use of subclause particles, the use of resumptive adverbs, the availability of V2 syntax and with that the availability of demonstrative pronoun and deictic adverb paradigms (Kemenade, 2009), and the degree/stage of clause integration, i.e. the shift from parataxis to hypotaxis (Van den Nest, 2010). In addition, several meta-features of the text will be examined as well. I expect the results to provide an interesting perspective on (the effects of) the shift from parataxis to hypotaxis and on the breakdown of Verb-Second in Middle English.

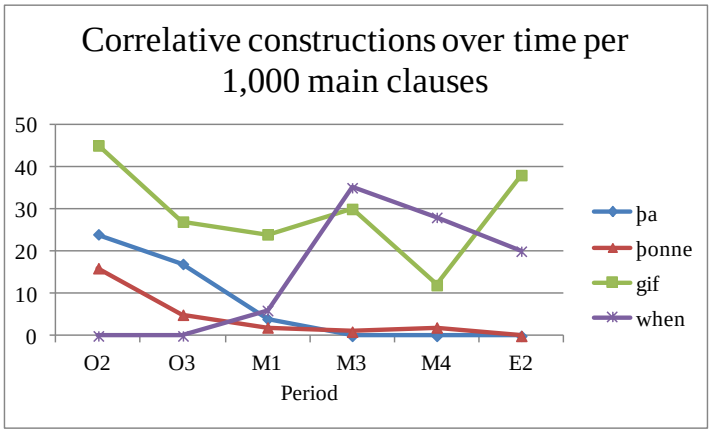

Figure 1. Use of *þa*, *þonne*, *gif* and *when* correlative constructions over time per 1,000 main clauses.

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Semantically predictable constructions – diachronic evidence from Greek

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The endeavor to combine the study of diachronic language change with a Construction Grammar (CxG) approach to language has taken root during the last decade (e.g. Bergs & Diewald 2008, Fried 2013). Overall these papers apply the CxG approach to diachronic data with the purpose of answering questions relating to language change, either specific empirical or theoretical questions. This paper, however, approaches the matter from the opposite perspective: it uses diachronic data in order to address a theoretical debate within CxG.

In traditional Berkeley Construction Grammar semantic nonpredictability is a necessary requirement for a linguistic unit to qualify as construction (e.g. Fillmore, Kay, O'Connor 1988; Goldberg 1995; Fried 2013). The background for this requirement is that if the meaning of a linguistic unit can be predicted by means of combining other well-known patterns, then that unit is simply the result of ordinary semantic composition and needs not be included in the grammatical inventory. Some recent descriptions within CxG of grammatical constructions, however, take the view, based on psycholinguistic research, that some semantically predictable units are best understood as grammatical constructions (e.g. Goldberg 2006; Bybee 2013).

The purpose of this paper is to provide evidence from diachronic linguistics for the latter viewpoint, i.e. that some semantically predictable units are entrenched in language in a way that makes them functionally and structurally equal to nonpredictable units, and therefore these predictable units should be considered grammatical constructions on par with the nonpredictable constructions.

As evidence for this viewpoint I use the example of two Byzantine Greek future periphrases, *thélo* ('I want') + infinitive (INF) and *méllo* ('I am about to') + INF, which differ with regard to semantic predictability. The examples with *thélo* + INF are taken from a 14th C AD literary text; the examples with *méllo* + INF are taken primarily from papyri from 4th to 7th C. AD, but I also refer to later usage. The fact that the periphrases belong to different synchronic stages does not impair the argument, since the argument does not rest on the interrelation of the periphrases, but on the comparable usage of the two.

ta pleutiká polý <u>théloun</u> <u>koustísei</u>
DA ships a-lot FTR cost-INF

the ships <u>will cost</u> a lot

(Chronicle of Morea (H), 601)

ótan de <u>méllete</u> <u>pémpsai</u> tin thygatéra mou, pémpson tin mitéra
when and is-about-to-2PL send-AOR.INF DA daughter my send-IMPER DA mother

and when <u>You are going to send</u> my daughter, send (also) the mother
(private letter, AD VI-VII)

The most obvious interpretation of *thélo* ('I want') + INF is volition, not future time reference. Contrary to this, speakers who know the meaning of *méllo* ('I am about to'), the meaning of the ensuing INF, as well as the semantic outcome of the syntactic combination VERB + INF will easily be able to decode the meaning of the periphrasis as future time reference. Thus, *thélo* + INF is semantically nonpredictable, whereas *méllo* + INF is fully predictable. Nevertheless, the paper demonstrates that despite the difference in predictability, these two periphrases develop common syntactic patterns:

1. retention of the INF (*thélo/méllo* + INF) at a time when the INF was being replaced by a finite phrase in the context of many lexical verbs.
2. embedding in subjunctive clauses (*na* (subjunctive marker) + *thélo/méllo* + INF).
3. development of an impersonal phrase with deontic meaning (*théli/mélli* (impersonal) + *na* (subjunctive marker) + FINITE NON-PAST).

These similarities show that despite the difference in predictability, *thélo* + INF and *méllo* + INF occupy parallel roles as grammatical constructions in Byzantine Greek, i.e. as units among the grammatical stock to be drawn from.

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The syntax and semantics of ($[N+V]_V$) verbal compounds in Ancient Greek

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In Ancient Greek we find a number of compound verbs with the structure ($[N+V]_V$). They are verbal formations with a first nominal element and a second verbal one, as typified, e.g., by *polemopoieîn* 'make war' (a compound of *pólemos* 'war'and *poiéō* 'make').

In a typological perspective, these verbal compounds belong into the domain of what is usually refered to as 'incorporation', which Baker (2002: 262) defines as "a phenomenon in which two roots that would normally head distinct phrases are combined into a single morphological word". Although other word classes can be involved, 'incorporation' is usually thought of as the combination of a noun and a verb resulting in a verb (cf. Mithun 1984: 847, Booij 2007: 92-93). In our case, a verb like *polemopoiéō* consists of an incorporated noun and a verbal root with its usual inflectional morphemes and, in principle, the incorporated noun is expected to be the direct object of the verb. The compound verb would thus be synonymous with a verbal phrase like

pólemon poieîn
war.AC make.INF
'make war'

Incorporation is typical of polysynthetic languages and its use and scope is more restricticted in an inflected language like Ancient Greek (cf. Mithun 1984 for a hierarchical and implicational classification of the various types of incorporation). It is thus interesting to explore the semantics and syntactic behavior of this class of compound verbs in a non-polysynthetic language and compare the results to what has been found for polysynthetic languages.

In this paper, I analyze in a diachronic perspective ($[N+V]_V$) verbs in Ancient Greek which are not derived from a pre-existing compound noun (cf. Grandi – Pompei 2012 for a classification of *-éō* verbs in Ancient Greek). After determining the path of development of this word formation pattern (cf. Jacques 2012: 1208-1209) in Ancient Greek, my investigation has focused especially on the following aspects:

a) thematic relationship between the 'incorporated' noun and the host verb (the 'incorporated' noun is not always the patient of the verb);

b) transitivity/intransitivy of the compound verb (not all compound verbs of this kind are intransitive in Ancient Greek);

c) valency of the compound verb in contrast to the simple one;

d) referential value of the 'incorporated' noun in discourse;

e) semantics of the compound verb vs. the equivalent verbal phrase.

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Unstressed /i/ and /u/ in Old Norwegian – A study of the Norwegian runic material post 1050 CE

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In Old Norwegian a phenomenon dubbed *vowel harmony* affects the realization of the unstressed phonemes /i/ and /u/. This phenomenon has been seen as a progressive distant assimilation, where the closeness of a stressed vowel influences the closeness of the vowel in the following syllable. There has been debate concerning both the geographical distribution of this trait, and the rules governing the assimilation itself. Hægstad (1915; 1916) claimed that the south western parts of Norway lacked vowel harmony in the Old Norse period, whereas Housken (1954) and Pettersen (1989) have claimed that vowel harmony is to be found in manuscripts originating in the same area. Earlier research has used Roman script manuscripts as empirical sources, and the contemporaneous runic material has not sufficiently been taken into account.

In my talk I will make use of runic inscriptions to discuss the matter of the geographical distribution of vowel harmony in Old Norwegian, and the rules governing it. Since the vast majority of runic inscriptions are originals and thus a primary expression of the rune carver's language (Spurkland 1998), the runic inscriptions provide excellent complementary data when discussing the Old Norwegian vowel harmony. Accordingly, I have sought to examine to what degree vowel harmony is exhibited in the Norwegian runic material from approx. 1050 to 1400 CE, and furthermore whether the runic material shows any geographical variation.

Based on the results of my study I will argue that vowel harmony is present in most parts of the country, though conclusive arguments cannot be made for the coastal region of south western Norway. Furthermore, vowel harmony seems to be governed by the presupposed rules, though with some interesting aberrant data. I use ideas from *articulatory phonology* to discuss patterns in the anomalous data, and propose additional factors governing vowel harmonic distribution (Browman & Goldstein 1991; Garmann 2010).

This study is relevant to historical linguistic research on Old Norse, and Old Norse philology in general, for the added insight it gives into the supposed dialectal differences within Old Norwegian and for the fresh data added to the ongoing discussion surrounding the rules of vowel harmony. Furthermore, the study makes the methodological point that runic inscriptions are suitable for historical linguistic research, and that the study of Old Norse language could benefit from the independent data runic inscriptions can provide. Additionally, it explores the difficulties in describing dialectal variation in time periods when the data are exclusively written, which is relevant for historical linguistics and historical dialectology in general.

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Tiramisù and the history of the Romanian ‘neuter’

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Romanian has thousands of so-called *genus alternans* nouns showing masculine agreement in the singular and feminine agreement in the plural. The belief that this class constitutes a ‘third gender’, or a ‘neuter’ (i.e., neither masculine nor feminine), is deeply rooted among grammarians of Romanian and among typologists of gender systems. The relevant literature is too copious to cite here, but for relatively recent perspectives on Romanian as having a third ‘controller’ gender, see, e.g., Corbett (1991:150-52), Loporcaro and Paciaroni (2011:319), Loporcaro (forthcoming).

The view that Romanian has any kind of ‘third gender’ also has many opponents, including Maiden (2013), who suggested that invoking such a notion to describe the Romanian facts was both superfluous and incorrect. He argued, following a synchronic observation for modern Romanian of Bateman and Polinsky (2010), that the history of the ‘neuter’ entirely supports the thesis that the masculine gender of the singulars of such nouns, and the feminine

gender of their plurals, was an automatic and necessary consequence of the morphological identity of their desinences, and that *genus alternans* nouns could only exist, and survive in diachrony, where their singulars had an unambiguously masculine form (in -Ø or -*u*), and their plurals an unambiguously feminine form (in -*e* or -*uri*). No deviations from this pattern were allowed diachronically, and otherwise regular changes threatening to compromise this distributional pattern could be shown to be systematically blocked. One type of apparent exception, the regional/dialectal type MSG *buzunar* 'pocket' FPL *buzunări* (for standard Romanian MSG *buzunar* FPL *buzunare*), with a gender-ambiguous ending -*i* in the plural, could be shown to conform perfectly to the general principle because its innovatory root-allomorph furnished an independent guarantee of feminine gender.

In the proposed paper I briefly recapitulate the earlier arguments put forward by Maiden (2013) and then address a number of counterexamples to his claim which I and others have since brought light, or which received inadequate attention in that earlier presentation, and which in some cases propose powerful arguments for recognizing a third gender beside feminine and masculine. The diachronic comportment of these apparent counterexamples will be scrutinized and the conclusion will be that, while my original thesis needs refinement to allow for the role of semantic and purely syntactic factors in the behaviour of 'neuters', it nonetheless emerges very robustly supported from this survey of the new facts.

Some major counterexamples involve the accommodation of neologisms. One relatively trivial type involves a large class of nouns, based on Latin, Italian or French models, in singular -*iu* and plural -*ii*, which are masculine in the singular and feminine in the plural despite the fact that final -*i* is ambiguous as to gender in Romanian (e.g., MSG *studiu* 'study' FPL *studii)*. These nouns can be plausibly 'saved' for the proposed analysis by evoking the fact that *genus alternans* is only found in inanimate nouns (thereby excluding some apparent masculine counterexamples) and that inanimate plural nouns in plural root-final -*i* + desinence *i* are *all* feminine. The sole stumbling block, namely MSG *condroniu* 'field cow-wheat' MPL *condronii*, is removed by showing, on independently motivated grounds (required elsewhere in my analysis), that the true characteristic of *genus alternans* nouns is not that they are 'inanimate', but that they denote 'non-living' things: there are no *genus alternans* plant names.

The recent creation of some compound inanimate nouns following the model V+N reveals nouns for which the *genus alternans* seems to be arbitrarily specified, since the morphological structure is wholly ambiguous. Hence we have, for example, MSG *portochelari* 'spectacle case' MPL *portochelari*, but MSG *portchei* 'keyring' FPL *portchei*. But I will show (and to my knowledge this has not been discussed before) that compounds of this type have the interesting property of forming their plurals from the plural of their constituent noun, both morphologically and morphsyntactically: since *ochelari* is masculine plural the plural of *portochelari* is masculine, and since *chei* is feminine plural the plural of *portchei* is feminine. The gender of these plurals is still entirely predictable from their structure.

The greatest apparent difficulty for my original thesis is posed by *tiramisù* and such other recent neologisms as *cappuccino*, *mango*, *amaretto* or *kiwi* 'kiwi fruit') which, by virtue of their endings, simply lie completely outside the inflexional system of gender-marking of Romanian and yet (for most but, significantly, not all speakers) have entered the language with masculine singulars and feminine plurals. Perhaps surprisingly, these can be analysed in exactly the same

way as an apparently completely different kind of counterexample, this time from syntax, as adduced by Loporcaro (forthcoming). This is the fact that inanimate *singularia tantum* nouns (i.e., words which by definition have no plural and for which one cannot therefore appeal to properties of their plural to explain their agreement behaviour), show feminine plural agreement when coordinated — proof, it is claimed, that they have 'neuter' gender independently of their morphology. I shall demonstrate that in both these cases we have a reflection of the fact that feminine plural agreement is simply the *default* in Romanian for nouns denoting non-living referents, in the absence of morphological or other clues as to their gender. This is demonstrable in sundry ways (e.g., the fact that *toate*, FPL of *tot* 'all', is very commonly used to mean 'everything'). I further propose some empirical tests to confirm these claims.

I show, finally, how a lexical, rhetorical, innovation of political discourse, the anthropomorphization of the notion of the 'state' (MSG *stat* FPL *state*), revealed itself exquisitely sensitive to the sexual connotations of masculine and feminine gender, in that in the singular one can only refer to a 'brother' state, but in the plural only to 'sister' states, showing that such nouns are not 'neuter' (i.e., *neither* masculine nor feminine) but definitely *both* masculine (in the singular) *and* feminine (in the plural).

In conclusion I shall insist that the view that Romanian has a 'neuter' is not only superfluous, but apt seriously to distort the synchronic and diachronic facts, and I shall uphold the view that for the diachronic emergence of a florid *genus alternans* system such as that found in Romanian it is necessary for singular and plural to have morphological properties which *force* their respective attribution to opposite genders.

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How selectional restrictions funnel language change: passive constructions in English and German

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Usage-based and other functional theories of language change and especially research on grammaticalisation generally view frequency as the central factor in the emergence of new linguistic structure. What is, however, less clear is what motivates changes in frequency in the first place. Notions such as iconicity (Haiman 1983), relevance and generality (Bybee 1985), prototypicality (Bybee 2010), and system optimisation (Haspelmath 2014) have remained vague and difficult to operationalise in a testable model. In our paper, we propose that selectional restrictions on the combinability of words may provide a better foundation for such a model. Specifically, we develop a predictive model of how selectional restrictions affect frequency, and thus language change, and apply it in a case study.

There are various kinds of "selectional" restrictions that operate below the level of syntax and that influence what can or cannot be combined (see e.g. Asher 2011, Jacobs 2006 for the theoretical modelling of selectional restrictions). One common type are restrictions imposed by semantics, especially tense and aspect, such as the well-known fact that present tense and perfective viewpoints generally lead to marked readings if they are possible at all (Smith 1997). Our hypothesis is that such selectional restrictions may be a factor behind changes in frequency, as they funnel what can be possible candidates for chunking and development into prefabs/constructions. Since some combinations will either be outright impossible and others will be less frequent due to their marked nature, they may form less optimal candidates. We hypothesise that mapping out selectional restrictions can give an insight into what may be considered frequent as opposed to infrequent constructions, and why this might be the case.

We tested this hypothesis in a study on the development of the passive construction in German and English. Our investigation focused on the early Old English and Old High German periods (850-950 CE) and the end of the Old English period and the beginning of the Middle High German period (1050-1150 CE). Previous work established that both languages start out with a similar inventory of fully compositional constructions of a copula verb plus a past participle, whose readings depend on their aspectuo-temporal configurations (Mailhammer & Smirnova 2013). However, the constructions in the two languages subsequently diverge in promoting different copula verbs to auxiliary verbs in passive diatheses.

Starting from the assumption that constructions evolve from the range of possible combinations, we investigated the available configurations of copula constructions with respect to tense and aspect parameters. The aim was first to see what kinds of configurations might be more prototypical for a copula construction with passive reading and how other readings were distributed in the corpus and whether this could provide any clues as to their further development in both languages. The model we developed to describe these constructions computes the compositional meaning as a function of the semantic properties of its elements, especially tense and aktionsart (similarly to Randall & Jones 2014).

Given the prototypical function of a copula construction all state readings are prototypical representatives, but precisely those are unlikely candidates to develop into passive diatheses, as passives typically denote processes. Thus, the marked reading obtained in configurations with a process outcome, is expected to increase if the end-result is to be a passive diathesis. This means that the prediction is that typically only combination with 'become' as the copula verb (especially in the present tense) and past participles of transitive activity or accomplishment

verbs are the first to increase in frequency and to develop into passives but not combinations with 'be', 'become', or stative and achievement verbs.

Applied to German and English, this predicts that the above copula constructions should be distributed as follows:

(1) Distributional predictions of type of copula and aktionsart of participle

a. German: initially low frequency, and then increase in frequency of combinations with 'become' in the present tense as well as past participles of transitive activity and accomplishment verbs

b. English: initially low frequency, and no increase in later periods; perhaps even an increase in resultative-stative combinations

The corpus data confirm our hypotheses: Synchronically observable restrictions in combinability of copula constructions with passive readings in Old English and Old High German leave two developmental paths: maintenance of a copula construction and grammaticalisation into a passive. The predictions with respect to the configuration that permits the second development, namely combinations of present tense 'become' with activity verbs and semelfactives is borne out for German, which eventually grammaticalises 'become' into a passive auxiliary, while the 'be' construction remains a copula construction. For English the prediction is not borne out directly: the fact that OE *weorðan* remains a copula construction is predicted from the distribution at the end of the OE period, but that the *b*-forms of *bēon* do not grammaticalise into a passive has reasons outside the aspectuo-temporal restrictions imposed on the construction.

The implications of this case study are that selectional restrictions are indeed shapers of language change and that hypotheses built on modelling the compositional values of lexical semantics can make testable predictions as to the paths of structural development.

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The grammaticalization of Basque articles in adpositional phrases: why Basque is not an exception

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1. Introduction

Basque is usually classified as a typical agglutinative language, but it also has a definite article; this category is not common in this language type. Himmelmann's work (1998) offers an account for some irregularities in the grammaticalization of articles in adpositional phrases; he also gives a diachronic scenario in order to explain how can articles develop in agglutinative languages, but this diachronic explanation fails to explain the Basque case. I will make a proposal for the reconstruction of the definite paradigm of the noun declension based on the grammaticalization of D-elements; I will illustrate it with the inessive case. I also assume Himmelmann's ideas, and show that Basque data can be fit into his generalization if we just make some adjustments to his diachronic scenario.

2. Some basic facts about Basque declension

(a) According to Lehmann's scale (1985: 302-303), Basque case markers can be classified as agglutinative affixes or primary adpositions, and these postposed cases seem to be quite ancient (Trask 1998).

(b) Basque also has a postposed definite article *-a* 'the'; it is widely accepted that this article appeared in the Middle Ages, following a grammaticalization process from the distal demonstrative *ha* 'that' (1). It can also appear in adpositional phrases, such as the inessive in (2).

(1) **etxe ha* 'that house (ABS)' > **etxeha* > *etxea* 'the house (ABS)'
house that

(2) *etxe-a-n* 'in the house'
house-the-INESS

(c) In the definite plural declension, there is an infix *-eta-* in the local cases (3), which is usually assumed to be of latin origin, the plural of the collective suffix *-etum*.

(3) *etxe-eta-n* 'in the houses'
house-PL-INESS

(d) The relevant demonstrative forms for the discussion are the following: in the singular, *han* 'there', which previously stood for 'in that'; in the plural, *hetan* 'in those'.

3. Himmelmann's generalization

According to Himmelmann (1998: 337), D-elements and adpositions in their intermediate stages of grammaticalization interact, and the definite article is blocked from phrases with primary adpositions or agglutinative case markers, as shown in the following table:

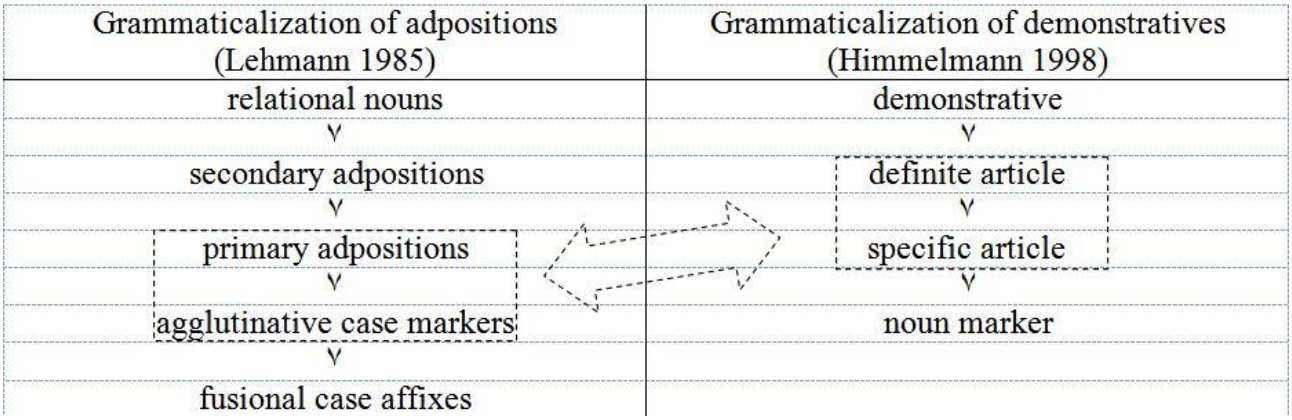

Table 1. The combination of adpositions and D-elements that typically ban the article use.

The generalization illustrated in Table 1 holds true for a wide range of languages, even non-agglutinative ones. This is the kind of adpositional phrases where articles are typically excluded, and that remain as idiosynchratic constructions in many languages: sp. *en cama, a pie*, ing. *in bed, on foot* etc.

4. The problem and a diachronic solution

In agglutinative languages, idiosynchratic constructions like the ones in the previous chapter are the norm, and such languages typically lack articles.

Still, there are agglutinative languages that do have articles. In order to explain this deviation from the generalization, Himmelmann (1998: 342) offers the diachronic scenario in (4):

(4) "If the article is regularly used with a given secondary adposition (for example, *inside*) and this secondary adposition is further grammaticised into a primary adposition (*in*), there is no reason to discontinue the use of the article at some point along this gradual development".

This solution does not work for Basque: adpositions seem to have been primary at the time the article arose.

5. A diachronic explanation of the Basque definite declension: the inessive phrases

I propose that the grammaticalization of definite articles in Basque did not follow an agglutinative pattern. Instead, constructions consisting of *noun + declined demonstrative* grammaticalized as a whole into definite expressions. This can explain certain morphonological phenomena, such as the presence of a dissimilation process in the absolutive (5) that is absent in the inessive (6a) in Western dialects:

(5) Absolutive: *sofa* + *-a* > *sofea* 'the sofa'

(6) Inessive: a. *sofa* + *-an* > *sofaan*/*sofan* 'in the sofa'

b. *sofea* (ABS) + *-n* > ***sofean*

If the formation of the inessive phrase would have followed a typical agglutinative pattern, simply adding the inessive marker to the absolutive phrase as in (6b), the expected result

would have been ***sofean*, which is ungrammatical. Therefore, I propose that the declined demonstrative as a whole was attached to the noun:

(7) a. Absolutive construction: **sofa ha* > **sofaha* > *sofaa* > *sofea* 'the sofa'
b. Inessive construction: **sofa han* > **sofahan* > *sofaan/sofan* 'in the sofa'

We are thus dealing with two different constructions, that grammaticalized through two different paths. I propose that the same happened in plural definite phrases and that a *noun + declined demonstrative* construction was grammaticalized, as in (8); there is no need to resort to a latin *-eta* suffix.

(8) *etxe hetan* > **etxehetan* > *etxeetan* 'in the houses'
house in.those

Actually, the intermediate stage **etxehetan* with <h> may be attested in old examples such as *Erroheta* (1025).

6. A complementary diachronic scenario for Himmelmann's

The diachronic explanation in (4) can be complemented as follows: a *noun + declined demonstrative* construction may further grammaticalize into a *noun + declined article* construction. Himmelmann's diachronic scenario was based on the grammaticalization of adpositions; I have proposed that Basque diachrony is an example of a mirroring process, where the explanation is based on the grammaticalization of declined demonstratives. See table 2:

Himmelmann's diachronic scenario Grammaticalization of the adpositional phrase	A complementary diachronic scenario Grammaticalization of the D-element
'inside the house' (Article bearing secondary adposition phrase) ∨ 'in the house' (Article bearing primary adposition phrase)	*etxe han* 'in that house' (Phrase formed by a *declined demonstrative*) ∨ *etxehan* > *etxean* (Phrase formed by a *declined article*)

Table 2. How does a definite article enter phrases with primary adpositions.

This view also makes an interesting point about the agglutinative character of the Basque language: the grammaticalization of demonstratives followed a non-agglutinative pattern in Basque, and triggered a non-canonical feature for an agglutinative language, namely the existence of a definite article.

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From Epistemic to Deontic? The curious incident of the Greek verb *endechetai*

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It has been repeatedly observed in the grammaticalization literature that verbs become grammaticalized following specific syntactic and, especially, semantic pathways, for instance verbs with a volitional meaning are very likely to become future-referring markers (cf. e.g. Bybee, Perkins & Pagliuca, 1994, Traugott & Dasher, 2002, among many others). Those pathways were originally held to be unidirectional, but are lately regarded as –more or less- strong tendencies, given the recent discussions on cases of de-grammaticalization (cf. e.g. Norde, 2009). However, one such pathway that is still effectively considered as unidirectional –or almost unidirectional- is the one tying the two fundamental types of modality, according to which verbal or other elements used to express deontic modality can subsequently acquire an epistemic meaning, but not the opposite, i.e. epistemic verbs can never develop a deontic meaning. The unidirectionality of this semantic pathway has been slightly challenged (cf. Pakendorf & Schalley, 2007 and Noël & van der Auwera, 2009), but is still widely held as true.

This paper aims to provide a more serious challenge to this assumption, based on the evidence of the diachronic development of the Greek verb *endechetai*. This verb is still extant in Modern Greek with an epistemic meaning ("it is possible"), and it is with this modal meaning that is found already in Ancient Greek (5th-4th c. BC), as can be seen in (1):

(1) hois haphe: monon hyparchei aisthe:sis, poteron endechetai
which – DAT touch only exists sense, whether it is possible
phantasian hyparchein toutois, e: ou
imagination exist –INF those – DAT, or not
"to all those who have no sense but touch, whether it is possible for them to have imagination or not"
(Arist. *De anima*, 434a)

However, this seemingly straightforward retention of the ancient meaning is clearly undermined by the use of the very same verb to convey a deontic meaning in the late Medieval period (ca. 11th-15th centuries), if not earlier, as shown in (2):

(2) Peri ekeinou opou ouden entechetai na ton lavoun marturan
For whom-GEN that-REL not must that him take witness
"About those that should not be taken as witnesses"
(*Assises* A, 143 / 14th c.)

Given this rather surprising development, the paper aims to track the hitherto unknown history of this verb from the classical period through Hellenistic-Roman times to Medieval and Modern Greek, in order to account for:

a) the emergence of a deontic meaning out of an epistemic verb, on the basis of the careful examination of the relevant data
b) the seemingly discontinuous history of the verb (epistemic > deontic > epistemic) based on the sociolinguistic history of Greek

More specifically, the paper argues that deontic meanings (or constructions) can arise out of epistemic ones in specific linguistic contexts, such as negative contexts, or in specific pragmatic circumstances (e.g. for the expression of warnings or threats, cf. also Pakendorf & Schalley, 2007). This straightforwardly challenges the long-held assumption of the irreversible deontic > epistemic pathway and, as a result, allows us to argue that the notion of 'constructionalization' and the relevant 'constructional changes' (as put forward e.g. in Traugott & Trousdale, 2013) is perhaps better suited than the notion of grammaticalization to capture such diachronic phenomena, given its greater flexibility and its specific attention to context.

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Christine Meklenborg Salvesen, University of Oslo: Licensing *pro* in Old French

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INTRODUCTION Both V2 and *pro* in Old French (OF, 9th – 14th century) are normally

seen to be contingent on verb movement to a head in the CP field. They are considered typical root phenomena, but even so, it is generally accepted that both may occur in subordinate clauses. In this paper I will show that verb movement to the C domain followed by an operator movement to its head is not a sufficient condition for *pro* to occur. The mechanism that triggers *pro* is more complex than previously assumed.

***PRO* IN DECLARATIVE MAIN CLAUSES** *Pro* may occur in a declarative clause if an element other than the subject precedes the finite verb (1).

(1) ET lors l' enmeine devant l'autel et s' asieent ensemble
and then him brings in-front the-altar and REFL sits-down together
"And then he brings him in front of the the altar and they sit down together."
(graal_cm, col. 174c, l. 33)

The analysis commonly given for this structure is the following (2) (excessive structure omitted).

(2) [$_{CP}$ lors [$_{Co}$ l'enmeine [$_{TP}$ *pro* [...]]]]

In GB terms *pro* has to be governed by a category that identifies it and that precedes it. The finite verb may only govern *pro* when it has moved to C^{o} (see among numerous others Adams 1987, Roberts 1993, Vance 1997).

***PRO* IN INTERROGATIVE MAIN CLAUSES** A different context that has obligatory V-to-C movement are interrogative clauses. Roberts (1993) claims that *pro* is quite common in direct questions, especially in the 11th and 12 th centuries. He also finds *pro* in indirect questions. As a pilot study, I have gone through all direct questions in the *La Queste du Saint Graal*, a 13th century prose text (note that 11th and 12th century texts are typically in verse) in the database *Base du Français Médiéval* (BFM, http://txm.bfm-corpus.org/). Of a total of 98 interrogative clauses, only 3 contain a null subject. These examples contain impersonal verbs and as such they are not convincing examples of *pro*. The standard question in 13 th century OF prose is as in (3).

(3) Sire chevaliers ou alez vos
sir knight where go you
'Sir, where are you going? ' (graal_cm, col. 190d, l. 32)

The structure of (3) is as in (4). The hanging topic (sire chevaliers) has been omitted.

(4) [$_{CP}$ ou [$_{Co}$ alez [$_{TP}$ vos [...]]]]

***PRO* IN THAT-CLAUSES** We see that even though both declarative and interrogative main clauses involve verb movement to C^{o}, *pro* only occurs in main declarative clauses. This indicates that V-to-C is not sufficient as a prerequisite for *pro*. Evidence for this is further corroborated when we look at embedded clauses. Using the BFM, I have gathered a corpus of 879 embedded *that*-clauses from *la Queste*, and I find that 14 % have V2, but only 3.8 % (25) have *pro*. The proportion of *pro* shrinks further when we exclude embedded clauses introduced by the polarity items *ja* 'already' and *onques* 'ever', which arguably never target the C domain in neither main nor embedded clauses (Ingham 2012). We are then left with 12 clauses – 1.4 % of the corpus (6).

(5) et tu deïs que non feroies
and you said that neg do.COND
'and you said you would not do it' (graal_cm, col. 184c, l. 18)

In her seminal work on OF word order, Vance (1997) found that 33 % of the main clauses in a text sample from *la Queste* contained null subjects, and that 17.5% had a V2 structure (XP-V- S). We see that the proportion of embedded V2 is only slightly smaller in embedded contexts, but that there is a huge discrepancy with respect to *pro*. Following Salvesen & Walkden (ms) I will analyse embedded V2 as involving verb movement to Fin^o, which should license *pro* as well if verb movement to the C domain were a sufficient prerequisite.

PRO IN EMBEDDED QUESTIONS If we turn to embedded interrogative clauses, we find the opposite tendency. In a large corpus extracted from the *Corpus de la littérature médiévale*, Salvesen (2009: 143) found that about half of the embedded interrogatives introduced by *que* 'what' contained *pro* in the 13th century (7).

(6) Ne set que face ne que die
NEG know what do NEG what say
'I don't know what to do or say' (MirNDChartr, p.190, v.94)

ANALYSIS A closer examination of the embedded contexts that contain *pro* reveals that the finite verb in most cases is either in the subjunctive mood or in the conditional tense (see (6)). This mirrors complementizer deletion effects in Italian (Poletto 1995). We will claim that in declarative clauses, *pro* is not only contingent on verb movement to C^o/Fin^o, but on the abstract feature [DECL] (declarative) under $Force^o$. In embedded clauses, that per definition cannot have an illocutory force, *pro* is in principle impossible. The only cases where *pro* may occur is when the verbal morphology belongs to the subjunctive or the conditional.

CONCLUSION The data clearly indicates that the licensing of *pro* in OF is far more complex than previously thought. There is a striking discrepancy between root and embedded contexts that may not be accounted for by difference in the position of the finite verb. In fact, verb movement to the C^o is merely one of at least two prerequisites that must be met for *pro* to appear.

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From Nominalization to Passive Marking: On the Development of Korean *-ti/-ci*

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Previous studies have noted a robust relationship between causatives and passives in many languages (e.g. Nedjalkov 1993; Yap & Iwasaki 2003). These studies have noted a possible extension from causatives to passives. The present paper investigates another source for passive markers. More specifically, we trace the development of Korean *-ti/-ci* from a nominalizer to a passive marker. Data for our analysis come from the Sejong Corpus. Based on our diachronic corpus analysis, we show that Korean *-ti* was initially used as a nominalizer in Middle Korean, attested in the 15th century, as in (1), with its phonological variant *-ci* likewise used as a nominalizer slightly later in the 16th century, as in (2). Results of our corpus analysis also reveal that until the 19th century, nominalizer *-ti*/*-ci* was always accompanied by negators, such as *-mal*, as in (1) and (2), and *-ani* as in (3). By the 20th century, *-ti*/*-ci* could be used in positive polarity contexts as well, as in (4). In other words, the use of Korean *-ti/-ci* has extended from that of a nominalizer that is restricted to negative polarity contexts in Middle Korean to a more general and more versatile nominalizer that could also be used in positive polarity contexts in Modern Korean. Crucially for our present analysis, by early Modern Korean, *-ti/-ci* could also be used as a passive marker ~~as early~~, as in (4). Notably, as seen in (5), passive uses of *-ti/-ci* were attested as early as the 15th century, with linker *-e/-ye* added as a suffix to the verb to form *-e/-ye tita/cita* passive constructions in Middle Korean. Consistent with its passive function, in Middle Korean, *-e/-ye tita* occurred only with transitive verbs (e.g. *kulhuy* 'loosen').

Our analysis further reveals that *-ti*/*-ci* was initially used as an eventive nominalizer, as in (1) to (3), and its usage was later extended to that of resultative nominalizer as well, as in (4). This extension involves a process of agent-defocusing of the subject NP, and paves the way for the emergence of *-ti/-ci* as a passive marker, as in (5). In other words, instead of hosting an agent NP, the subject position hosts instead a non-agent NP (e.g. patient or instrument NP). Initially, as early as the 15th century, such non-agent NPs were often accompanied by non-nominative case marking, such as instrumental case marker *-lo* in the Middle Korean example in (5). By the 16th century, as shown in (6), non-agent NPs in *-ti/-ci* constructions could be marked by nominative case marker *-i*, signaling further grammaticalization, initially via *-e/-ye tita/cita* passive constructions extended to intransitive verbs with resultative reading, giving rise to a middle voice

construction. Such middle voice usage of *-ti/-ci* was further extended to intransitive verbs with a spontaneous rather than resultative reading, as attested in (7) from the 17th century.

In Contemporary Korean, the passive use of *-ti/-ci* can co-occur with causative suffixes such as *-ki*, as in (8), or with the causative suffix elided, as in (9), particularly when an adjective predicate rather than a verbal predicate is involved. These causative-plus-passive-marked *-(ki)-e ci-ess-ta* [-(CAUS-LNK PASS-PST-DEC] constructions yield a complex resultative or stative passive construction, where either a patient, theme or state (the latter achieved as the result of some causative action) is highlighted while the causative event or the agent is suppressed.

Findings from this study contribute to a more comprehensive understanding of the variation of passive constructions and their development as well as discourse functions in Korean, with possible implications for the passive constructions in other languages as well.

Examples:

(1) *Kum-ul te nay-**ti** mal-la*
gold-ACC more sell-NMLZ NEG.do-IMP
'Don't sell gold anymore'
Lit. 'Don't be selling gold anymore.' (1447, *Sekposangcel*)

(2) *Ha-n mal-kwa ha-n il-ul ekuy-**ci** mal-la*
say-ADN word-with do-ADN thing-ACC violate-NMLZ NEG.do-IMP
'Don't go against what you said and what you did.'
Lit. 'Don't be violating what you said and what you did.' (16th c., *Kyeynyese*)

(3) *O-la-**ti** ani ha-ni mwues-i paspu-liiska*
come-IMP-NMLZ NEG say-as what-NOM be.busy-SFP
'Since I wasn't told to come, how can I be busy?'
Lit. 'Since no one told me to come, how can I be busy?' (17th c., *Kyeychwukilki*)

(4) *Na-nan mwusun kokcyel-lo capa-wa-nan **ci***
1SG-TOP what reason-with catch-PST-ADN NMLZ
tule po-sy-ess-o
hear see-HON-PST-SFP
'Did you hear the reason why I was caught?'
'In my case, did you hear the reason for my being caught?' (1907, *Komokhwa*)

(5) *Pal-lo kalh-san-ul tutuy-ni*
foot-INST knife-mountain-ACC step.on-as
*cumun mAtAy ta kulhuy-**ye** **ti**-kenul*
thousand joint all loosen-LNK **ti**-SFP
'Hiking up the steep mountain, all our joints are loosened.' (1459, *Welinsekpo*)

(6) *Sa-nAn pascip-i hel-**e**-**t**-e pAlAm-kwa pyetth-ul*
live-ADN house-NOM wear.out-LNK-ty-because wind-with sunlight-ACC
*kAliwu-**ti** mot hA-kenul*
shield-**NMZ** NEG do-SFP
'Because the house that we live in is run down, it can't shield us from wind and sunlight' (1588, *Sohakenhay*)

(7) *ElAlm-i muntuk phul-**e**-**ty**-e koki is-ye*

fish.net-NOM suddenly undo-**LNK**-**ti**-because fish exist-and
ptuyyena(li)-kenal
jump-SFP
'Since the fishnet opened up suddenly, fish (that had been caught earlier jumped out of it.' (1617, *Tongkwuksinsoksamkanghayngsilto*)

(8a) *Ku sin-i ai-eykey sin-**e** **ci**-ess-ta*
the shoe-NOM child-to put.on-**LNK** **ci**-PST-DEC
'The shoes were slipped on the child's foot.' (Colloquial contemporary Korean)

(8b) *Ku sin-i ai-eykey sin-ki-**e** **ci**-ess-ta*
the shoe-NOM child-to put.on-CAUS-**LNK** **ci**-PST-DEC
'The shoes were slipped on the child's foot.' (formal Contemporary Korean)

(9) *Pang-i nelp-**e**-**ci**-ess-ta*
room-NOM be.wide-**LNK**-**ci**-PST-DEC
'The room was widened (because more space has been cleared up after Mom has tidied up the room).' (Contemporary Korean)

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Diachrony and Morphological Equilibrium: the Case of Southern New Indo-Aryan Verb

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Cases of inflectional homonymy specifically related to "highly marked" paradigm cells constitute a cross-linguistically recurrent phenomenon. In traditional structuralist terms (cf. Brøndal 1940), such cases have been considered as instances of a "Principle of compensation" making the marked term of a category allow less subdistinctions than its unmarked counterpart(s) (cf., e.g., the dual of Sanskrit nominals, which allows less case distinctions than the singular and the plural). A possible way of dealing with such phenomena is to assume that the relevant property is frequency (rather than "markedness", cf. Haspelmath 2006, Greenberg 1966) and to hypothesise that a cross-linguistic tendecy exists for inflectional paradigms to avoid exponents with a usage frequency critically lower than the average (i.e. the average frequency of the exponents belonging to the same paradigm, cf. Milizia 2013; Id. in press). The adequacy of such an approach seems to be confirmed by the fact that, as an alternative to exhibiting

inflectional homonymy, paradigms often show fully cumulative (unsegmentable) exponents in "normal" cells, but analysable inflections (i.e. combinations of exponents) in critically rare cells[19]. Indeed the replacement of cumulative exponens with "semi-separate" exponents has the effect of avoiding the presence of exponents univocally associated to single rare cells.

On the other hand, the locus where the hypothesised tendency exerts its influence must be identified with diachronic change (and possibly with the acquisition mechanisms influencing it) and not with the linguistic competence of the individual, since syncretism patterns are not "generated" but learned. The present paper, in particular, aims to highlight how the dispreference for paradigms with exponent frequencies excessively different from each other might have influenced some aspects of the development between Middle Indo-Aryan and Marathi verb.

Among the six person/number values ([1st, 2nd, 3d] × [sg., pl.]) for which Marathi verb forms inflect, [1st pl.] and [2nd pl.] are certainly significantly rarer than the others (cf. also Bybee 2007: 57). Interestingly, precisely these two cells form a paradigm partition specifically characterized by two independent phenomena of syncretism/inflectional homonymy.

The first concerns the intransitive/transitive opposition. In the habitual past tense (see table 1 below), which is the continuation of the Old and Middle IA. present tense (see table 2 below), a series of intransitive endings, which is the continuation of the common thematic class, is distinguished from a series of transitive endings that is the reflex of the Old Indo-Aryan *–aya-* class (i.e. the Sanskrit tenth class). However, both [1st plural] and [2nd plural] lack specific transitive endings (see Bloch 1920: 232 f.; Zograf 1976: 223; cf. also Dhongde & Wali 2009: 86).

The second relevant pattern concerns gender opposition in the etymologically secondary conjugations, which show gender agreement in addition to number/person agreement. In the non-habitual past (see table 3 below), as well as in the conditional, the 1st plural and the 2nd plural are the only forms that do not distinguish gender (cf. Bloch 1920: 249)[20]. On the other hand, some dialectal varieties introduce gender distinctions into the 2nd plural by means of endings that can be considered as instances of semi-separate exponence: the forms in question are indeed identical to the corresponding 3rd plural forms with the addition of a 2nd plural person marker *–t* (see table 4 below, cf. Bloch 1920: 250).

Moreover, a detail about the formation of the non-habitual past is particularly interesting since it is consistent to the postulated preference for syncretism or semiseparate exponence in rare cells, but for fully cumulative morphs in frequent cells (like the cells of the singular). The gender-distinguishing endings are formed by adding the number/person markers 1sg *-ṃ*, 2sg. *-s* (zero for third persons) to participial forms (in the direct case) inflected according to the Marathi *-ā/-ī* nominal declension (see table 5 below, cf. Bloch 1920: 187-189)[21]. However, the 1st sg

[19] For the discussion of an example concerning the expression of diathesis in the Ancient Greek verb by means of decomposable dual endings such as *-t-on*, *-t-ēn*, *-sth-on*, *-sth-ēn*, see Milizia 2014

[20] In the old language of the *Jñaneśvarī* the same pattern was also shared by the present tense. Subsequently, with the appearance of the distinction between present and conditional, gender distinctions were also discarded in the 3rd plural of the present, which took the final morph m./f./n. *-āt*. We can say, therefore, that a "natural" paradigm partition singular vs. plural replaced a "morphomic partition" (in the sense of Aronoff 1994) 1sg/2sg/3sg/3pl vs. 1pl/2pl.

[21] In turn, such a declension is the continuation of the Old Indic *-aka-*/*-ika-* type (cf. Whitney 1891: 468, §1222i).

masculine and feminine forms seems to be created on the basis of participial forms inflected according to the pronominal declension (see table 6 below, cf. Bloch 1920: 208). This mixture of declensions, which Bloch qualifies as "inexplicable" (1920: 249), has the side-effect of diminishing the synchronic segmentability/analysability of the ending set. Indeed, while a hypothetical ending pair 1sg. m. *-*lāṃ*, f. *-*līṃ* would have been parallel to 2sg. m. -*lās*, f. -*līs*, and would have been therefore analysable as *-*lā*-+-*ṃ*, *-*lī*-+-*ṃ* (i.e., with endings interpreted as sequences of two separate exponents), the morphs that we observe, i.e. 1sg. m. -*loṃ*, f. *-*leṃ*, are not analysable and, therefore, fully cumulative.

Tables

1) Marathi habitual past		
	intrans.	transitive
1sg	*-eṃ*	*-īṃ*
2sg	*-as(i)/-es*	*-īs*
3sg	*-e*	*-ī*
1pl	*-ūṃ* →	
2pl	*-ā* →	
3pl	*-at*	*-īt*

2) Middle Indo-Aryan present		
	-a-infl.	*-aya*-inflecti n
1sg	*-āmi*	*-emi* (<*-ayāmi*)
2sg	*-asi*	*-esi* (<*-ayasi*)
3sg	*-ai*	*-ei*
1pl	*-āmo*	*-emo*
2pl	*-aha*	*-eha*
3pl	*-anti*	*-enti*

3) Marathi past tense			
	m.	f.	n.
1sg	*-loṃ*	*-leṃ/-lyeṃ*	*-leṃ*
2sg	*-lās*	*-līs*	*-leṃs*
3sg	*-lā*	*-lī*	*-leṃ*
1pl	*-loṃ*		
2pl	*-lāṃ*		
3pl	*-le*	*-lyā*	*-līṃ*

4) Dialectal Marathi Past Forms			
	m.	f.	n.
2pl	*-let*	*-lyāt*	*-līṃt*
3pl	*-le*	*-lyā*	*-līṃ*

5) Marathi *-ā-* (f.*-ī-*) direct case			
	m.	f.	n.
sg	*-ā*	*-ī*	*-eṃ*
pl	*-e*	*-yā*	*-īṃ*

6) Marathi pronom. direct case			
	m.	f.	n.
sg	*-o*	*-e (> -i)*	*-eṃ*
pl	*-e*	*-ā*	*-īṃ*

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A Grammaticalization Analysis of Romance Subordinating Conjunctions

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The major differences between Latin and Modern Romance subordination are typically presented in terms of the well-attested shift from parataxis to hypotaxis and the "substitution" of Classical Latin forms with the now generalized Romance subordinator *que*. Insufficient work has been done, however, to contextualize or explain the overall development that has taken place here. In order to address this issue in a more comprehensive and methodical manner, this paper will present a diachronic analysis of these changes via the grammaticalization framework with the purpose of elucidating both the mechanisms involved in, and the motivation behind, the trajectory (illustrated below).

relative pronoun	**>**	**temporal**	**< >**	**causal**	**>**	**Complementizer**
ACC form	>	*quom*	< >	*quom*		
ACC form + DEM	>	*quando*	< >	*quando*		
ACC form + jam	>	*quoniam*	< >	*quoniam*	>	*Quoniam*
ACC N PL form	>	*quia*	< >	*quia*	>	*Quia*
ACC N SG form			< >	*quod*	>	*Quod*
hybrid form					>	*Que*

Given the extremely large inventory of subordinating elements in Latin, this paper will focus on a narrow set of conjunctions: *quom*, *quando*, *quoniam*, *quia* and *quod*, along with early Romance *que*. These six conjunctions are vital to this analysis, since they all derived from a common source (the PIE relative pronoun $*k^w$-) and they all followed a parallel grammaticalization cline, which ultimately resulted in the highly grammaticalized modern Spanish & French complementizer: *que*. It is this form that has served as the basis of an innovative set of Romance conjunctions, a development which will also be analyzed as part of the overall trajectory addressed in this paper. Data included in this analysis is taken from various Latin texts (e.g. *Senatus Consultum de Bacchanalibus, De Re Rustica, De Bello Gallico, Peregrinatio Egeriae, Menaechmi, Satyricon)* as well as Early Romance texts (e.g. *La chanson de Roland*, *La vie de Saint Alexis*, *La cantilène de Saint Eulalie*, and a compilation of anonymous medieval Spanish texts in Gifford & Hodcroft 1966).

In terms of methodology, there are fundamentally two ways to approach a framework of grammaticalization: one involving a characterization of the grammaticalized elements (see C. Lehmann 1995), and another involving a characterization of the grammaticalization processes themselves (see Heine, Claudi and Hünnemeyer 1991 and Hopper and Traugott 1993). Since Lehmann's framework includes several syntagmatic criteria that are arguably better indicators of synthesis than grammaticalization proper, it is the earlier approach that will be used in this analysis. Authentic data from various periods in the history of Spanish and French will be used

to illustrate all major components of this framework: generalization[22], decategorialization, specialization, phonetic erosion, layering, divergence and renewal.

The analysis proposed here is significant for several reasons. Firstly, it serves to strengthen our understanding of the development of these conjunctions, while highlighting the major differences between the Latin and Romance systems. Secondly, the analysis reveals important cross-linguistic similarities or universals, such as the semantic link between temporal and causal conjunctions. Thirdly, the analysis validates existing claims about the grammaticalization process itself, particularly with regard to the existence of two distinct types of grammaticalization: one in which new forms fulfill old functions, and one in which new forms fulfill new functions (see Meillet 1912 and Ramat 1998). This distinction will be particularly useful in justifying the differences seen in the grammaticalization paths of the two final candidates, *quod* and *que*.

Examples illustrating "generalization" of *quod*

(1) OLD LATIN [relative pronoun]
*hoc est praedium **quod** ubi vis expedit facere*
'this is the sort of farm **which** is profitable to make everywhere' (Cato, R.R. 9)

(2) CLASSICAL LATIN [relative pronoun, with possible causal interpretation]
*occupandum Vesontionem, **quod** est oppidum maximum Sequanorum*
'to seize Vesontio, **which/because** (it) is the largest town of the Sequani' (Caes., D.B.G. 1.38)

(3) CLASSICAL LATIN [causal conjunction]
*Helvetiis erat amicus, **quod** ex ea civitate Orgetorigis filiam in matrimonium duxerat*
'he was friendly to the Helvetii **because** from that state he had taken Orgetorix's daughter in marriage' (Caes., D.B.G. 1.9)

(4) LATE LATIN ["empty" complementizer]
*Pharao, quando vidit, **quod** filii Israhel dimiserant eum, ... isset cum omni exercitu suo intra Ramesse*
'Pharaoh, when he saw **that** the children of Israel had escaped him,…went with all his army into Rameses' (Pereg. 8.5)

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[22] Examples illustrating the generalization of *quod* are provided on page 2.

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Putting stress on herbals

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By the end of the 14th century, in connection with the second South Slavic influence, several orthographic changes took place in East Slavic. Among these the use of diacritics, which in Russia had become obsolete, was reintroduced. Some of the diacritics were used to mark phonetic features, e.g. accent, some to mark boundaries within a word or between words, e.g. hiatus, yet other marked a loss of an orthographic feature, e.g. the loss of ь/ъ. Of course, sometimes the diacritics did not have any of the functions above, but were merely used as a cliché.

Scholars working in the field of accentography, a branch of accentology, have been trying to establish what signs were used, how they were used and what they meant. Establishing the relationship between diacritics, historical phonetics, and dialectology could increase our knowledge of how words were actually pronounced as well as where and when a manuscript came into being.

Many of the studied accentuated texts show different layers of usage of accentuation marks. Thus accentuation marks in one and the same Russian manuscripts can reveal features of Great Russian pronunciation, e.g. наро́ды, просла́ви, regional pronunciation, e.g. зове́те, стра́на, "bookish" pronunciation, e.g. до́брѣ, о́рли, liturgical accentuation, e.g. не и́мет, на де́нь,[23] or, for example, Bulgarian pronunciation, e.g. на́род, за́кон (Zaliznjak 1985, 188–198; Steensland 2006). In other manuscripts only one, two or a combination of these layers appear (Steensland 1997, 9–10, 12–13).

[23] The two examples reflect the "standard accentuation" proposed by Ambrosiani (1991, 25), which might be merely an orthographic feature.

Since accentuated manuscripts are often religious or theological, and thus written in Church Slavonic, the pure Russian features might be repressed. For the same reason that *глава* is preferred to *голова*, some (Church Slavic) accentuations could have be seen as "better" than other (Russian). Trying to find out more about pure Russian accentuation patterns in such texts will probably not give us the whole picture. On the other hand, to undertake studies of accentuation patterns revealed in non-religious texts, texts on more worldly themes, could hopefully give us a better insight into the Russian accentuation of the time (cf Zaliznjak 1981).

Some layers of the use of the diacritics are copied from manuscript to manuscript (Steensland 1997, 13). Such diacritics might also skew the analysis by the introduction of, for instance, Bulgarian or Serbian accentuation in a Russian manuscript. Therefore a study of a manuscript that has not been copied from another manuscript or that could have been copied only from another Russian manuscript could probably shed more light on Russian accentuation.

Contrary to a rather widespread opinion, the scribes did not accentuate manuscripts to make the text easier to read, which is clear from the fact that a great number of manuscripts were not accentuated or were not accentuated throughout and that accentuation marks often were put on words with well known and immobile stress (cf. Steensland 2006, 90).

A text that complies with the demands of being worldly and not having been copied from other manuscripts than East Slavic is the Russian translation *Blagoprochladnyj vertograd zdraviju* of the Middle Low German herbal *Gaerde der Suntheit*. The translation, finished in 1534 in Moscow by grand duke Vasily III's court physician Nicolaus Bülow, is a medical guidebook, as were all herbals at that time, and had a worldly theme, by all standards. The text was also translated directly into Russian. The best manuscript, by some scholars considered to be the original translation from 1534, is accentuated.

In my talk I will present my study on what accentuation marks were used, their distribution and what they meant, trying to answer mainly three questions: 1) Do the accentuation marks in *Blagoprochladnyj vertograd zdraviju* reflect Russian pronunciation and what do they tell us about it?; 2) Which words are accentuated and which are not, and why is that so? In other words, what guidelines did the scribe of *Blagoprochladnyj vertograd zdraviju* have?; and 3) Does the text genre have any effect on the use of diacritics?

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The English derivational prefix *a-* as a bound form of the functional category Pred

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The English prefix *a-* developed from the stationary prepositions *on* and *in* and productively produced predicative adjectives (and adverbs) expressing "in a state or position or manner of" at least until the 19th century. The historical connection between *a-* and *on/in* gave rise to an implicit assumption that *a*-adjectives are reduced forms of *on/in*-PPs, with *a-* being a bound form of P. However, this view is inadequate in view of the prefix's categorial property. It combines not only with a noun but also with an adjective and a verb and uniformly derives a predicative adjective, as follows:

(1) a. **N > A**: *abloom, aboard, afield, afire, afoot, aground, aloft, amuck, apace, ashore*
b. **A > A**: *abroad, afar, afresh, ajar, alike, alive, alone, aloud, anew, aright, askew*
c. **V > A**: *ablaze, afloat, agleam, aglitter, aglow, asleep, astray, atwitter, awash*

As a new analysis, we will show (i) that *a-* is a very rare English morpheme realizing the functional category Pred (Bowers 1993) and (ii) that this form-meaning pairing arose as a result of the diachronic head movement from P to Pred. When an *on*/*in*-PP is used as a predicate, its subject is also introduced by a Pred. Then, grammaticalization as an upward head movement (Roberts and Roussou 2003) can change the category of *on/in* from a P to a Pred.

Interestingly, our examination of the total of 307 *a*-words collected from the *OED* has revealed that while denominal and deadjectival types were attested constantly from the 13th century, the deverbal type became productive much later, most of their examples (95% thereof) being attested in ModE. In fact, 67% of all the deverbal instances were attested in the 19th century. Also revealed is the fact that base verbs of *a-* are either unergative (e.g. *asleep*) or transitive (e.g. *aweary*), with the former type predominating. As the following examples show, *a-* derivatives from transitive verbs exhibit semantics close to the adjectival passive forms of those verbs:

(2) a. 1653 *When we have disputed and contended ourselves* <u>*aweary*</u> (= wearied)
b. 1872 *The other man,* <u>*a-grime*</u> *With guilt* (= grimed with guilt) (*OED*)

We will claim that the deverbal type most likely started by cognate nouns of unergative verbs undergoing *a*-prefixation; that is, early instances such as *asleep* were produced as

denominal *a*-words based on nouns such as *sleep*. Then, the gradual accumulation of such categorially ambiguous instances gave rise to the possibility of *a*- attaching to transitive verbs, as in (2). Since *a*-words are morphological PredPs, *a*- suppresses the causative component (CAUSE or small *v*) of a transitive verb base and brings to the fore its stative component.

If correct, our analysis is a new finding about the realizational possibility of Pred in English; an overt bound form of Pred has not yet been found in this language.

Adding a Diachronic Dimension to the Case of *Let Alone*

Jakob Neels (University of Leipzig)

The "formal idiom" *X, let alone Y* has gained lasting fame thanks to Fillmore et. al's (1988) seminal paper from the early days of construction grammar. Over the last two decades, several studies (Sawada 2003, Toosarvandani 2008, 2009, Cappelle et al. 2015 among others) have revisited the case of *let alone*, adding new insights into the complex properties of this construction. However, since none of these studies takes a diachronic corpus-based approach, various questions on the evolution and variation patterns of the *let alone* construction remain unanswered.

The present study therefore explores the historical development of *let alone* since the earliest attestations of this conjunction-like expression around 1800. On the basis of usage data from the Corpus of Historical American English (Davies 2010-; COHA), the history of the *let alone* construction is depicted as an instance of grammaticalisation that crucially involves a process of context expansion (Himmelmann 2004). First results indicate that, within the construction, *let* gradually sheds the complementation behaviour of a verb via shifts in the relative frequencies of the different constituent types able to follow *let alone*. In the process, uses of the type *let alone* + V-*ing* serve as an important bridging structure for reanalysis to occur. Other formal variables, such as the syntactic position of *let alone* and the (non-)use of punctuation marks, equally point towards a gradual change from VP-like status to conjunction-like status.

Collocation measures expressing the attraction between *let* and *alone* demonstrate the effects of (relative) frequency in grammaticalisation. Already in the earliest 19th-century data, *alone* ranks among the top right-adjacent collocates of *let*. *Let alone* thus qualifies as a prefabricated chunk, even in the earliest stages of the grammaticalisation process. Chunking, entrenchment and routinisation were promoted by the high pragmatic salience of the construction (cf. Schmid 2014), leading to formal and functional changes characteristic of grammaticalisation, despite the initial absence of high frequencies of use.

As regards functional aspects, further analyses of the entire data set from the COHA are expected to provide a clearer picture of how the *let alone* construction acquired its present-day canonical meaning 'X, so a fortiori Y' (cf. Fillmore et al. 1988). This entailment meaning appears

to have been foregrounded over time through pragmatic enrichment. The diachronic usage data can also shed new light on other functional issues addressed in previous synchronic studies, such as the unclear status of *let alone* as a negative polarity item. From early on, the use of *let alone* has been largely confined to negative polarity contexts, but there has always been a small minority of "positive" uses of *let alone* with no discernible negative polarity triggers. The relative frequency of these positive uses remains stable over time, meaning that *let alone* shows no signs of becoming either generalised or a more rigid negative polarity item.

On a more general level, this corpus study illustrates how the specific and the abstract interact in language change. Minor shifts in usage preferences, as reflected for instance in colligation patterns, may have an effect on language users' cognitive representation of a particular construction, which in turn affects future usage choices. This kind of feedback loop between grammar and usage allows grammaticalisation processes to proceed in an incremental fashion.

Keywords: grammaticalisation, frequency effects, colligations, English

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(De)grammaticalization and iconicity

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Topic:

The modal auxiliaries in Present Day Dutch are fairly often used (much more easily than the English or German modals, e.g.) without the presence of a second, full verb in the clause, as for example in: *dat kan* (literally) 'that can', *het moet nu maar even* 'it must now', *mag dat wel?* 'may that?', *dat zal niet* 'that will not', etc. (e.g. Haeseryn et al. 1997). Earlier research (Nuyts 2013) has shown that this is a recent 'acquisition' in the language: such uses are strongly increasing in frequency since Early New Dutch. We are thus facing a fairly massive case of re-autonomization, hence possibly of degrammaticalization, of the Dutch modals. In this talk I will try to offer an explanation for this remarkable pattern of evolution.

Method:

The research is based on a corpus investigation of the diachronic evolution of the three most central Dutch modals, *kunnen* 'can', *mogen* 'may' and *moeten* 'must', as observable in representative samples from 4 stages of the language: Old Dutch, Early Middle Dutch, Early New Dutch and Present Day Dutch.

Analysis:

A scrutiny of the grammatical and semantic properties of the 'new' autonomous uses of these modals, in comparison with the properties of their 'regular' auxiliary uses and of the original main verbal uses (from which the auxiliary uses have initially been derived in older language stages), reveals two main distinctive features of the former: Grammatically, they typically occur in an intransitive pattern with usually a deictic element (referring to a contextually given state of affairs) as their subject (which is very different from the original main verbal use, which was transitive). And semantically, they typically 'focus' on deontic and directive meanings, i.e. meanings which in most semantic theories are considered 'propositional operators' or, in, Traugottian terms (Traugott and Dasher 2002), fairly strongly (inter)subjectified meanings (this is unlike the original main verbal use which had an 'objective' meaning, and the real auxiliary uses which feature the full range of modal meanings, with the dynamic modal one usually as the predominant one). As I will argue, these facts suggest that the tendency towards re-autonomization of these verbs is due to an iconicity effect, whereby the grammatical shape reflects (better than the regular auxiliary use) the underlying semantic operator/operandum relationship. If so, the iconicity principle here appears to overrule the general tendency towards increasing grammatical dependency (or 'grammaticalization') which characterizes evolutions in the domain of grammatical markers.

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The negative existencial cycle in Ancient Egyptian

Elsa Oréal (C.N.R.S.)

Analyzing how negative existential may provide a source for Standard Negation, Croft 1991 distinguishes between three stable types vs. types showing variation[24] :

Type A : 'The negation of the existential predicate is performed by the verbal negator'
Type B : 'there is a special negative existential predicate, distinct from the verbal negator'
Type C : 'there is a special negative existential predicate, which is identical to the verbal negator'

Earlier Egyptian data remain widely unknown to general linguists. My work on the verbal system of this language and its evolution from Old Egyptian (ca. 2700-2200 av. J.-C.) to Middle Egyptian (ca. 2200-1700 av. J.-C.) led me to study its negative constructions. It thus appeared that its long attested history allows us to observe a negative existential cycle, and even more than just one cycle. The more ancient phase of the language shows a type including variation, type B ~ C, where 'the special negative existential form comes to be used as a verbal negator' :

ni *t* *-f*
NEG.EXbread 3MSG
'He has no bread'

ni *sDm* *-f*
NEG listen\NMLZ 3MSG
'he did/does not hear'

ni *sDm-w* *-f*
NEG listen\NMLZ-INDEF 3MSG
'He shall not be heard'

[24] Croft, William. 1991. The evolution of negation. Journal of Linguistics 27, 1–39.

The extension of the negative pattern to other verb forms then leads to a type C. We will briefly illustrate the next steps of the cycle from this stage to a a type A :

Negation of existence	*ni* *wnt* *t* NEG exist-NMLZ bread 'there is no bread'
Negation of verb	*ni* *sDm* *-f* NEG listen\NMLZ 3MSG 'he did/does not hear' *ni* *sDmw* *-f* NEG listen\NMLZ.INDEF 3MSG 'He shall/will not be heard'

This type agains turns to a phase showing variation, with the emergence of a new negative existential form arising from the fusion of the verbal negator and the existential verb (*ni wn* > *nn*) :

nn *o* *-k* *r* *-s*
NEG.EX act 2MSG PREP 3FSG
'You have no right/act concerning it'

I will propose distinct possible diachronic scenarios for the following extension of this dedicated negative existential to part of the verbal system, as postulated by Croft's model. But the next steps of the cycle do not fit within the ideal picture of Croft's model, as the use of *nn* before verb remains limited and it cannot be considered as the general verbal negator, even if Earlier Egyptian indeed witnesses the rise of still another negative existential dedicated to this function:

nn ***wn*** *oq-w* *jm*
NEG exist ration-PL there'
'there are no rations there'

Thus, we will try to question the extent to which historical data fit in with Croft's model, including its explanation of changes from one type to another. For innovations seem to occur in a less ordered fashion than is postulated. The contemporaneity of the stages appears to be particularly problematic, as Van der Auwera[25] (2010 : 4-5) puts it in a more general perspective. While Croft's model is certainly relevant for a better understanding of Egyptian facts, a detailed diachronic study of data suggests concrete paths of emergence for various negative constructions

[25] See Van der Auwera 2010. On the diachrony of negation. In : Laurence R. Horn (ed.) *Expression of negation*, 73–101. Berlin & New York: Mouton de Gruyter.

and partially challenges suggested motivations for change. The less problematic is phonological fusion (type A to B), nicely illustrated by Egyptian data (*ni wn* > *nn*). More debatable is the role played by emphasis and syntactic analogy, and we will discuss this divergence on the basis of Egyptian data. As for emphasis explaining change from type B to type C, I will show that structural features might play a greater role. Syntactic analogy as a motivation for change from type C to A also needs to be reconsidered. Egyptian data indeed show two historical examples of this transition in the renewal of negative existential predication, both having a functional motivation. The proposed contribution will thus aim at substantiating the abstract schema as elaborated by Croft with potentially corresponding Egyptian negative constructions attested in the documentation. After showing its relevance for the analysis of Egyptian data, it will possible to propose a critical assessment of paths of change from each type to the following as proposed by Croft 1991[26].

Reflexive nominal compounds in Vedic

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Deverbal nouns may usually inherit the lexical argument structure of the verbs from which they are derived (Rappaport, 1983), and nominals derived from obligatorily transitive verbs allow the expression of their agents (Wechsler, 2008). Taking this into account, it is expected that deverbal reflexive nominals would license the expression of their co-referent agents. In many languages, this is fulfilled by means of composition with intensifiers/reflexives (König, 2011).

In Vedic, reflexive nominal compounds are obtained through the combination of a (dependent) reflexive/intensifier word form and a (head) deverbal noun or adjective, as in *svayukta* 'self-yoked', *svakṣatra* 'master of oneself, self-ruling'.

This paper analyzes how diverse compounds are created in Early Vedic through the addition of different reflexive or intensifying strategies as the dependent element: (1) *svá-*, (2) *svayám*, (3) *ātmán-*, and (4) *tanū́-*. The expected conclusion is that these compounds are not completely interchangeable. It will be shown that compounds with (3) and (4) always preserve the original lexical meaning of the dependent member as 'breath of life, person' and 'body, person' respectively (*tanūpā-* 'protecting the person', *ātmadā-* 'granting breath of life'), and they are not real reflexive nominals, despite *ātmán-* (occasionally) and *tanū́-* (more frequently) can be considered as reflexives in some verb clauses (Kulikov, 2007). On the contrary, (1) and (2) can be regular reflexive nominals.

A further differentiation between (1) and (2) will be noted, as only *svá-* seems to be highly productive and normally attached to deverbal formations derived from transitive verbs, as

[26] For a similar approach based on other languages, see Veselinova 2014. The Negative Existential Cycle Revisited. In : *Linguistics*.fc.

well as to some nondeverbal nouns/adjectives. In turn, compounds with *svayám* have regularly an adnominal or attributive intensifying sense, except for the cases in which it is joined to *bhū-* 'becoming', 'existing', derived from a nontransitive verb. In this peculiar case, the compound can be ambiguous between an autonomous and a reflexive interpretation (*svayambhū-* 'self-existing', 'self-generated').

Given the importance of word formation for understanding verb valency and argument structures, the data presented here aims to broaden the picture of reflexives and reflexivity in this language.

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Contact-induced change and the emergence of a new verbal class in Eastern Basque

Manuel Padilla-Moyano (University of the Basque Country – University of Bordeaux Montaigne)

The common proto-Basque substrate and subsequent language contact between Basque and Gascon Occitan are well-established facts. Souletin, the easternmost Basque dialect, underwent the strongest Gascon influence (Allières 1992). On the one hand, the Souletin people developed strong bonds with their Bearnese neighbours; on the other hand, the prestige and vigour of Occitan was greater in Bearn than elsewhere in Gascony (Trotter 2006). Beyond extensive lexical borrowing, historical Souletin shows traces of the Gascon influence in its phonology, morphology and syntax.

Basque has three verbal classes, depending on the suffixes for the perfective participle: 1) *-i*, 2) *-tu* and 3) *-Ø* —with a special subclass of radicals ending in *-n*—. Almost all ancient Basque verbs belong to the 1st and 3rd classes; conversely, Latin and Roman loans systematically join the *-tu* class, which, from the Middle Ages onwards, became the only productive one (Trask 1995). All Basque dialects exhibit the same verbal classes, with the exception of Souletin. This eastern variety has a number of verbs which can occur with both *-(a)tü* and *-i* endings: *esprabatü* ~ *esprabi* 'prove', *ezkhapatü* ~ *ezkhapi* 'escape', *akhabatü* ~

akhabi 'finish'. I will argue that the origin of this ending *-i* is not the proto-Basque suffix **-i* present in the ancient verbs from the 1st class, but a Gascon inflectional morpheme.

Based on a extensive corpus of historical Souletin (16th–19th centuries), I will describe the emergence of a new *-i* class of verbs and the decline of their counterparts in *-(a)tü*. I shall propose that this process should be explained in the light of an intensive contact situation (Thomason & Kaufman 1988) which has led to morphological changes in the borrowing language. In our case study, the borrowing language has developed a new perfective participle from some conjugated forms of the donor language. It is not strictly a case of inflectional borrowing (cf. Gardani, Arkadiev & Amiridze 2014), but rather an example of analogy.

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The Development of Definite Articles: A counter revolution

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The development of the definite article cross-lingusitically is usually seen as a classic example of grammaticalization and as such is generally accepted by most approaches to language change. The source is usually thought to be an anaphoric adnominal demonstrative. The pathway DEM > DEF has been claimed to be amply attested in the world's languages, among them Romance, Germanic, Basque, Semitic, several Creoles and others. Although this question has never been clearly explored, the assumption is that the definite article is primarily a feature of substantives and only affects adnominal modifiers in so far as they are part of the noun phrase. Contrary to the standard view, we argue that at least for some Germanic and Semitic

languages, there is good evidence to suggest that the early development of the article is associated with modifiers and only secondarily with the substantive head.

In earlier stages of Germanic, when the definite article was still incipient, it seems to be the presence of a modifier (whether adjectival or prepositional) that triggers the presence of the demonstrative in environments where the demonstrative is variably found, e.g. with a possessive pronoun, cf. the Gothic examples (1a–b).

(1) a. ei jah atta izwar sa in himinam afletai izwis
that also father.NOM your.NOM that.NOM in heaven.DAT forgive.3SG.OPT you.DAT
'So that your father in heaven may also forgive you' (Mk 11:25)
b. ni tau atta izwar afletit missadedins izwaros
nor father.NOM your.NOM forgives.3SG misdeeds.ACC your.ACC
'Nor will your father forgive your misdeeds' (Mt 6:15)

In other words, the demonstrative only surfaces in an NP with a possessive if a modifier is also present, as in (1a), while the possessive pronoun alone is found in the absence of an adjectival modifier, as in (1b).

In the Central Semitic languages, the article originated from an adnominal marker, most commonly found attached to adnominal demonstratives or to other nominal modifiers.

(2) a. qāne haṭ-ṭôb
cane DEF-good
'The good cane' (Classical Hebrew, Jer. 6:20)
b. bayt l-muqaddas
house DEF-holy
'The holy temple' (Classical Arabic)

We will discuss what processes account for the development of the definite article and why the link to nominal modification explains the data much better than the current hypothesis.

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Identifying discourse functions of adverbial clauses in historical texts

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Several studies on present-day English adverbial clauses (AdvC) have suggested that discourse-pragmatic factors play an important role when it comes to the linear order of main and adverbial clause (e.g., Altenberg 1984; Chafe 1984; Diessel 1996, 2005, 2008; Ford 1993; Prideaux 1989). Whereas processing strategies often offer an explanation for the occurrence of final AdvCs, discourse factors may explain the placement of AdvCs in initial position, i.e. before the associated main clause. The suggested discourse functions vary with regard to the semantic type of clause and the text type studied.

Functions identified for initial AdvCs are primarily discourse organizational in nature, such as linking back to preceding utterances, framing the subsequent discourse (cf., Chafe 1984; Diessel 1996, 2005, 2008; Ford 1993; Haiman 1978; Verstraete 2004), providing "a guidepost" (Chafe 1984; Diessel 2008), or signaling "topic change" (Prideaux 1989: 35) when appearing "at the point of thematic discontinuity" (Givón 1990: 847). Final AdvCs on the other hand tend to provide NEW information or function as afterthoughts (Diessel 2008: 467). According to Verstraete (2004: 821) final AdvCs "often have a local function, elaborating on the State of Affairs […] of their main clause by specifying reasons, temporal circumstances, etc." With regard to conversational data, Ford (1993: 85) argues that "final temporal and conditional clauses serve to complete sentence information" without a discourse level function.

Depending on text type and data sample the identification and reliable categorization of discourse functions presents a problem for historical research. Whereas studies of contemporary spoken English can take, e.g., intonation contours into account (cf. Ford 1993), studies of historical data (which is of course always written) cannot do so. Testing "givenness" is yet another general problem when it comes to historical data (cf. Seoane 2012). Specific text types, e.g. diaries, do not allow for an easy identification of e.g. GIVEN or NEW information, as the relevant antecedent may be in an entry days, months, or even years ago. Measuring, e.g., referential distance in such (ego-)documents may thus not result in psychological real results. After all, the antecedent may still be discourse active for the author, even after a considerable period of time.

The present paper aims at identifying the discourse function(s) of pre- and postponed AdvCs in the *Diary of Samuel Pepys* (Wheatley 1893) and the *Old Baily Corpus* (Huber et al. 2012). These are taken to be representative of ego-documents and near-spoken historical texts, respectively. Factors investigated include framing, linking, afterthoughts, or elaboration. To do so the paper will suggest a continuum of different functions, e.g. from purely *temporal* to *elaborating*, which can help to economically categorize even larger amounts of data. The results of this study will be compared and contextualized with the results obtained in studies of present-day English - expecting similar tendencies.

This paper concludes with a more general discussion of methods in historical research. The study of information structure and adverbial clauses reveals that, desirable as it may be, there are a number of problems in categorizing larger quantities of data with regard to the discourse function of AdvCs in historical texts. Ultimately, a balanced use of quantitative and qualitative data seems desirable.

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Differences and similarities between individuals in ongoing grammaticalisation

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Historical syntax so far has overwhelmingly treated change as happening to an abstract object 'language'. But it is individual language users that change language. The past 10 years have seen a rising scholarly interest in individual differences in language behavior (Bergs 2005; Raumolin-Brunberg 2009; Nevalainen et al. 2011; Dąbrowska 2012; Barlow 2013; Hendriks 2013), especially for English, as the availability of large-scale corpora allows for substantial quantitative underpinnings of this line of research. In the same spirit, our paper takes a fresh look at the grammaticalization of *be going to*, a showcase of grammaticalization research. We examine the presence and nature of micro-changes during the lives of adult authors by means of longitudinal individual data from Early Modern English, when crucial changes took place in this construction.

As is well-known, *be going to* developed from an erstwhile fully compositional combination of [[*go*][allative motion]] + [[*be* V*ing*][imperfectivity/on-goingness]] + [[*to* Inf][purpose adjunct]] to an auxiliary for (imminent) future. The grammaticalization of *be going to* has been well-studied (see Traugott 2011 for a recent overview), and currently a great deal is known about the micro-processes of what Traugott & Trousdale (2013) have termed 'constructionalization' of this pattern. Still, the existing diachronic studies also show important weaknesses. All of them draw either on qualitative analysis of conspicuous examples from large databases, or are based on relatively small corpora of less than a million words per century. Fine-grained quantitative analysis, let alone quantitative analysis of individuals' language use, is still lacking.

In order to examine if individuals show signs of grammatical constructionalization, we selected 15 prolific authors from EEBOCorp 1.0 (Petré 2013), containing English books printed between 1473-1700, complementing it with data from the *Eighteenth Century Collections Online* database (ECCO). Individual author word counts range between *ca.* 300,000 and 10,000,000 words. All forms of *going* were extracted from this corpus and manually selected and analyzed for a number of semantic and morphosyntactic features that are known to be relevant in the grammaticalization of *be going to*. We use these features as diagnostics for the level of grammaticalization reached in a particular individual, which serves as the dependent variable in our inquiry. The features are (i) 'adjacency' of *go* and the *to*-inf part; (ii) 'structural' features ('fronting', i.e. extraction of the object of the *to*-inf; 'parenthetical use' (*this – I was going to say crazy – woman*); 'coordination' of *be going* with existing aspectual auxiliaries) – note that none of these appears in previous studies, most likely owing to the lack of a sizable corpus; (iii) 'goal': is there a goal location?; (iv) 'voice': is *go* followed by a passive *to*-inf? (v) 'motion': can the construction (still) be interpreted as involving spatial motion? (vi) 'animacy' of the subject. Each of these features is analyzed with a level of granularity that allows us to pick up small increments in the level of grammaticalization. We both looked at the behavior of each feature separately, and at their combined value, by computing a summative measure of grammaticalization. For each of the authors, we divided the collected data in half, to arrive at two categories 'earlier work' and 'later work', in order to check whether differences occurred through the years.

The scatterplot in the far left panel in Fig. 1 brings out the aggregate view on grammaticalization: the score on the Y-axis is a summative measure of how many grammaticalization features a certain datapoint displays. The lowess regression line has an s-shaped curve, typical of language change. The rise is significant (Kendall tau = 0.126, $p <$

0.0001). The middle panel, focusing on the authors ranked by year of birth on the x-axis, also shows an increase in the grammaticalization ratio. The far right panel breaks the middle panel down into the two periods for each author. Authors with an increased grammaticalization score in their later work are indicated in red. As can be appreciated, they form the majority of the individuals investigated. In our paper, we will investigate the differences and similarities between the authors in depth, and argue that the differences interfering with the overall general pattern are not fully random, but correlate with specific characteristics of the authors and their relative chronology.

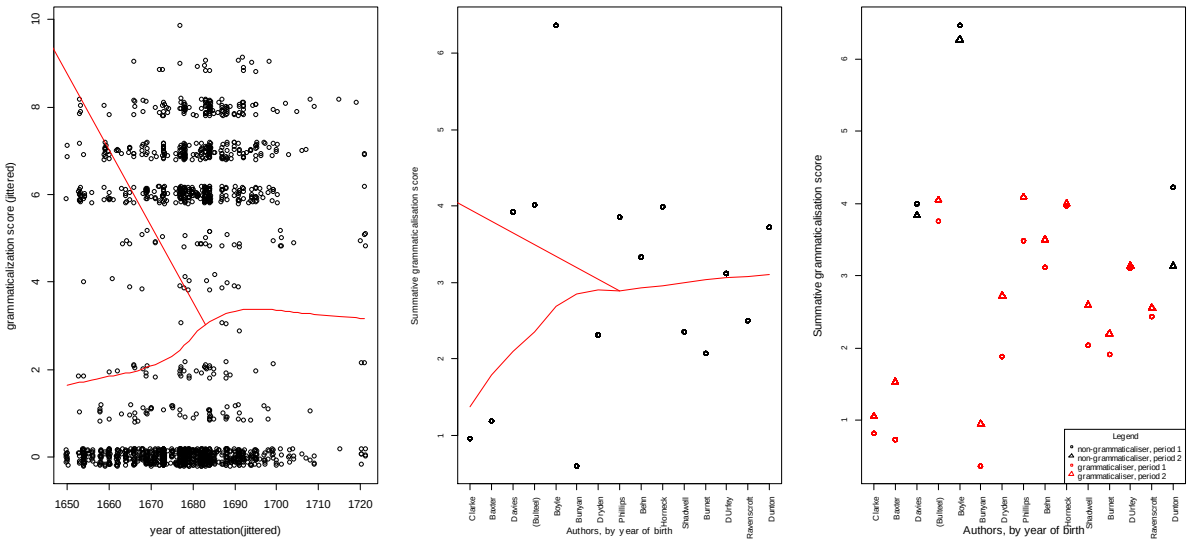

Figure 1: Grammaticalization of *be going to* in EEBO

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On the temporal nature of universals

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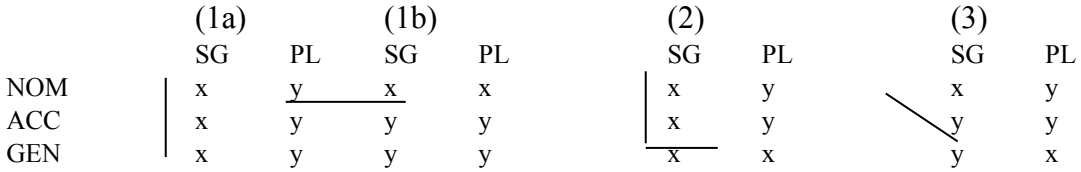
The relationship of typology and diachrony is an old issue, and continues to be debated controversially. The question is whether limitations of crosslinguistic diversity are due to **timeless laws** or to **laws of change**. On the first interpretation no language at any time would be allowed to contravene such laws regardless of previous and subsequent stages, which would guarantee that no language would ever change so as to end up being in contravention. On the second interpretation constraints would instead be curbing change, with limitations of diversity as the automatic consequences of what are impermissible transitions from one state to another. Rejecting universals, as has become fashionable lately, usually targets timeless laws (constraints on states); however, what is not often appreciated is that the existence or non-existence of laws of change (constraints on transitions) is an independent question.

In many cases of limitations on diversity this would seem a moot question. For example, a timeless law "No dual without a plural" is effectively equivalent to a law of change, "No innovation of a dual without a plural being distinguished from a singular (or such a number distinction being innovated simultaneously), and no loss of a plural as long as a dual is being distinguished (or such a number distinction is being lost simultaneously)". In other cases, a constraint can be made sense of timelessly as well as diachronically, although the motivations may be quite different. For example, "No infixes without adfixes" is plausibly motivated as an instantiation of a timeless dispreference of discontinuous constructions, harder to store and process than continuous constructions, but no less plausibly as a diachronic regularity to the effect that infixes can only ever originate from adfixes, internalised in order to optimise prosodic structures or (rarely) trapped inside an outer adfix.

Here I will present a case – concerning patterns of suppletion in inflection – where limited diversity can **only** be accounted for diachronically and where **no** timeless law can possibly be invoked. This is a case where crosslinguistic variation is unlimited insofar as every conceivable distribution of suppletive stems over paradigms is attested; nonetheless, certain disorderly paradigmatic distributions, while universally permissible, cannot come about in any conceivable manner, attesting to a diachronic constraint on transitions.

The question is how suppletive stems can be distributed over inflectional paradigms, and a constraint one might want to entertain is to do with whether the distributions have to respect paradigmatic structures. Modelling paradigmatic structures in terms of geometric arrangements, suppletion often patterns as in (1), with each suppletive stem extending over a solid block, as defined by a single inflectional category (with number and case merely used for exemplification). Suppletive stems can also extend to a neighbour outside their block, with the more complex distribution then having to be stated in terms of two categories ((2), stem *x* used for SG and GEN.PL). The most complex distribution conceivable are CROSSOVERS, with no uniform arrangement of the categories and their terms possible where the relevant cells would be horizontal or vertical neighbours ((3), stem *x* used for NOM.SG and GEN.PL).



Now, a survey of suppletion across a wide range of languages, in addition to frequent instances of patterns (1) and (2), also unearthes, if comparatively rarely, instances of crossovers (3). Hence, on empirical grounds, there can be no timeless law prohibiting such crossovers.

However, when it is taken into account how suppletion comes about, a diachronic constraint **can** be maintained. When suppletion is created through the COMBINATION of forms of separate lexemes in one paradigm, then paradigm structures **must** be respected and crossovers **are** prohibited. When suppletion develops through phonological DISSIMILATION of allomorphic stems of one lexeme, just about anything goes distributionwise. The impossibility of a timeless constraint on paradigmatic distributions is due to the fact that from the net results of such changes the different modes of origin of suppletion, combination or dissimilation, are indistinguishable. Regardless of their modes of origins, all suppletions are to be dealt with identically in synchronic grammar, however orderly or disorderly their distributions in paradigmatic terms; of their modes of origin, only one, namely combination, is severely constrained through paradigmatic structure.

Negative concord in Slavic: continuity or development?

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So far generalizations about the development of Slavic constructions with negative concord have mainly been based on the material from Old Church Slavonic, Old Russian and Old Czech. According to the dominant position in the Slavic linguistics, constructions which

exhibit negative concord, as in (1), developed from constructions which do not have an overt negative operator in the predicate, as in (2). More generally, it is assumed that all the Slavic languages underwent the same type of change: from a language with the non-strict negative concord to a language with the strict negative concord (Haspelmath 1997: 210–213, Brown 2002, Dočekal 2009, Tsurska 2010):

(1) Nikto nevie.
'Nobody neg knows.'
(2) Nikto vie.
'Nobody neg knows.'

Our empirical research of the Old Serbian data from the 12th to 15th century (Petković and Polomac 2013) attested both types of structure: a) NegQ + NegV (the negated universal quantifier and the negation of the predicate, as in (1)), b) NegQ + NegV (the negated universal quantifier and the absence of the negative operator in the predicate), as in (2)). The second type, however, was attested sporadically (in the parts of the charters written in Serbian Church Slavonic), and is a syntactic borrowing from Greek (via the Old Church Slavonic language). Given that negative concord in the Serbian language may be traced back to the oldest surviving documents, in typological terms, Old Serbian, just like contemporary Serbian, is a language with the strict negative concord.

The aim of this paper is to provide a unitary account of the development of negative concord structures in the Slavic languages. Our working assumptions are as follows: 1) the Proto-Slavic language belongs to the type with the strict negative concord; 2) the Slavic languages, in general, exhibit continuity in negative concord structures rather than development. Our hypotheses have been verified in the data excerpted from Old Slavic, Old Russian and Old Czech.

In support of our proposal, and as a counterargument to the position taken in Willis (2013), we set forth and explain the following findings and assumptions: a) an extremely low frequency of the construction NegQ + NegV in the Old Russian state documents; b) the construction NegQ + NegV in Old Czech may reflect a strong Latin influence (cf. Vachek 1947); c) the construction NegQ + NegV in the contemporary Russian dialects may be an outcome of recent areal developments, and not of the influence of Old Church Slavonic (cf. Haspelmath 1997 regarding the Germanic and Romance languages).

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The Indo-Aryan "alignment change" revisited

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In this talk, I will revisit a well-known case of alignment change, the shift from a nominative-accusative system to a split ergative-absolutive one in the history of Indo-Aryan. While Old Indo-Aryan is dominated by nominative-accusative alignment, many New Indo-Aryan languages have developed split ergativity along an aspectual axis. While this change is cited as the classical case of alignment change (along with the parallel development in Iranian) (e.g. Harris & Campbell 1995) and has been treated in a fair number of publications, I want to offer a novel analysis of the historical origins of the ergative construction. Rather than arguing for a passive-to-ergative change or for the rival analysis that the construction in question had always been ergative, I propose that it is a change in word class that lies at the heart of the phenomenon.

The *ta*-formation, a "perfective participle" formed from a verb stem with the suffix *-ta* which inflects for case, number and gender is at the origin of the perfective verbal form which triggers ergative case marking and agreement in many modern Indo-Aryan languages. A number of studies have addressed the *ta*-construction in Old Indo-Aryan. The initial claim put forward (e.g. Anderson 1977), that it was a passive at this stage, a proposal also found today (e.g. Verbeke 2013: 76-77), does not hold up to scrutiny. While the *ta*-construction does choose a patientive subject in the case of transitive verbs, it is neither semantically, morphologically, nor syntactically a passive: The subject is not restricted to patientive roles, the verb lacks passive morphology, and the construction does not have an unmarked active counterpart. An alternative

proposal developed by Klaiman (1987), Hock (1986) and others is based on the idea that the construction was already ergative from the start. While supporting the general line of argument that the *ta*-construction does not descend from a passive, I want to direct attention to the fact that the construction in most instances can be interpreted as nominal in Vedic, occurring as a modifying or predicative nominal and at times even in referential function (e.g. *iṣṭa*-, literally 'wished', lexicalized as 'wish'), and only later comes to acquire verbal status (see Delbrück 2009 [1888]: 382ff for an overview). At this stage, it is still predominantly rooted in the nominal sphere and as such neither qualifies for voice (i.e. passive) nor alignment (i.e. ergative).

I propose that one of the factors in the verbalization of the *ta*-construction was a growing sensitivity to agents as can be witnessed in certain types of complex clauses, as pointed out by Hock (1986) (who does not focus on the change in word class, however). In younger stages of Sanskrit and early Middle Indic, the *ta*-construction begins to appear as the predicative nucleus of matrix clauses with subordinate converb ("absolutive") clauses. When such converb clauses appeared with finite active or passive matrix verbs in Vedic, they were controlled by the subject of these verbs. The *ta*-construction, however, shows agent control (this pattern also spreads with passive or gerund matrix predicates, see Hock 1986). Compare the following examples with a passive matrix verb in Vedic prose (ex. 1) and a *ta*-construction in Epic Sanskrit (ex. 2):

(1) *sárvam* *parigṛ́hya* *sūyā* *íti*
all.ACC.SG.N encompass.ABS consecrate.PASS.1SG QUOT
'Having encompassed$_i$ everything, may [I]$_i$ be consecrated$_i$'
(ŚB 5.2.3.1, cf. Hock 1986: 22, translation my own)

(2) *devān* *apahāya*$_i$ *vṛto*
in_person god.ACC.PL.M reject.ABS chosen.*ta*.NOM.SG.M
yaḥ *sa* *mayā*$_i$
REL.NOM.SG.M DEM.NOM.SG.M INS.1SG
'Having rejected$_i$ the gods in person, he, who was chosen by me$_i$ […]'
(Nala 24.13ab, cp. Tikkanen 1987: 149, translation my own)

Agent control suggests that the instrumental argument has become part of the argument frame of the *ta*-construction. A growing sensitivity to agents in the syntax of the language is attested also in the realm of word order with a quantitative shift from subject-first to agent-first sentences (Hock 1986). I propose that this growing sensitivity in the domain of control relations was implicated in the *ta*-construction acquiring the status of a main verb, i.e. of an argument frame that consists of the nominal that it used to modify, as well as (in the case of transitive verbs) of the agent, which used to have the status of a syntactically unconnected adjunct.

In sum, in accounting for the origin of the ergative-absolutive pattern in modern Indo-Aryan languages, I propose that the change in word class can shed much light on the phenomenon. Here, evidence from control constructions offers insights into the way in which a growing sensitivity to agents is implicated in the verbalization of the *ta*-construction.

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Adverbs and the Left Periphery of Non-Finite Clauses in Old Spanish

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Cristina Matute (Saint Louis University, Madrid Campus)

The aim of this paper is to explore the different ways in which the left periphery changed in Spanish at the end of the Medieval Ages, and more specifically the role that adverbs play in the preverbal position of non-finite clauses in Old Spanish. Scholars like Hernanz (2011) argue that the infinitival clauses in Modern Spanish lack a left periphery on their own (1, 2):

1. *Lola dijo *bien* saber francés (Hernanz 2011: 268)
   Lola said *well* to know French
   "Lola said that she knew French *well indeed*"
2. *Juan {pretende/quiere} [UN FERRARI comprarse] (Hernanz 2011: 266)
   John {pretends/wants} A FERRARI buy-inf for himself
   "John {pretends/wants} to buy A FERRARI for himself"

Nevertheless, personal infinitives, those whose subject is expressed in infinitive clauses, allowed it to appear in a preverbal position (SV) in Old Spanish (3) and Golden Age Spanish, a position which has been associated with a contrastive focus (Sitaridou 2009) and, interestingly, it is also possible in Modern Spanish with the order VS (4):

3. por *yo* ffazer seruicio a cassio (Old Spanish, *General estoria* VI, Alfonso X)
   for I-nom render-infin favour to Cassio
   "for my having helped Cassio" (Sitaridou 2009: 40)
4. Antes de actuar Caballé/ella, el público estaba expectante (Modern Spanish)
   before of perform-infin Caballé/she-nom the audience be-past3sg expectant

"Before Caballé performed, the audience was expectant" (Sitaridou 2009: 38; apud Rigau 1995: 280)

As far as Old Spanish is concerned, non-finite clauses with infinitives and gerunds also allow other kind of preverbal elements which are not allowed in Modern Spanish anymore, like objects, prepositional phrases and, more often, adverbs:

5. doliesse el mucho en *assi se* perder aquellas scientias en muerte del (*General estoria* I, 33v)
   hurt-3sg-pas he much in *like this* get lost-inf those sciences in dead of him
   "The loss of those sciences after his death caused him a lot of pain"
6. otorgamos [...] de *nunqua uos lo* contrariar A nengun tienpo (CODEA, 1269, Asturias)
   consent-1pl-pres of *never you-dat it-ac* be-inf detrimental at no time
   "We consent to never ever contradict it"
7. veredes por estas ssus cartas que dizen assy *toda uia nos* teniendo desembargada mente desde los moiones fasta madrit (Doc. Villa Madrid, 1312, p. 219, apud Muñío Valverde 1995: 26)
   Will see-2pl-fut by these his letters that say like that *still we-nom* having freely from the boundary stones till Madrid...
   "You will see in his letters that state: 'we still keep the place from the boundary stones to Madrid without charge'..."
8. Et *ellos assy* fablando, vieron al Cid que vinie en pos vn moro (*Estoria de España* I, p. 606, apud Muñío Valverde 1995: 22)
   And *they like that* talking see-3sg-past to the Cid that come-3sg-past in after a moor
   "And while talking, they saw the Cid coming after a moor"

The preverbal position of these elements leads us to wonder what kind of role they played syntactically and semantically, if the positions of the left periphery were available in non-finite clauses of Old Spanish. In other words, did these clauses display a left periphery which was lost in the transition to Modern Spanish? Data suggests that it could have been possible, yet it must have been a reduced kind of left periphery; besides, Old Spanish shows evidence that this structure is not always projected. There are some positions that can be eliminated and others that still remain despite the lack of personal features in the verb. According to our data, we can identify up to two positions: one related to the subjects and another related to other elements such as adverbs of a very specific kind, those that share features with the focus (deixis, quantification, etc.). However, the negative adverb should be considered differently. In order to explain the role of these constituents in their preverbal positions, we must take into account that non-finite clauses present a secondary assertion in which the information is not asseverated (Pérez Jiménez 2006), so we must discuss the role that foci and topics would play in these structures.

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From visual perception to inference in the French evidential markers *apparemment, il m'est avis que* and *il paraît que*

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We compare here the evolution, from Medieval to Modern French, of three evidential markers linked originally with direct visual perception. Medieval French has many evidential markers based on visual perception: *il m'est avis que, par semblant, par avis, il pert que, si con il pert, si con il est aparissant, au semblant qui dehors en apparut, par aparence, selon la vraye apparence, par l'apparence du fait*, etc. The speaker is a direct witness and makes a statement of fact. The nature of the source of the information is sometimes doubly marked, by a verb of perception - mostly *veoir* or *esgarder*, Engl. *to see* - and by the evidential marker. The Middle Ages consider visual perceptive evidence as a guarantee of truth, as a reliable source and even as evidence admissible in court. This explains the frequence of evidential perception markers in Old French. They are much less common nowadays, as is pointed our for English by Chafe (1986; 268).

The verb *voir*, as is well known, is polysemic. It can mean to see physically, with the eyes, and also to understand "I see what you mean". Grossman/ Tutin (2010) speak of a perceptive and an intellectual meaning. Both meanings are old. A number of markers have this shift from the concrete to the abstract. It is the case for instance with *estre avis*: it means either a physical activity linked with visual perception, either an opinion, a judgment, a mental activity close to *croire*, *penser* (Engl. *to think*), or to epistemic *devoir* (Engl. *must*). This also explains why many markers connected with visual perception are also inferential evidentials.

We study here the evolution in French of *apparemment*, *il m'est avis que* and *il paraît que*. In Old French, all of them can function as evidential markers of direct visual perception. In its Medieval use and until 1650, *il m'est avis que* is also linked with the unreal, the dream, the imagination.

Apparemment (Engl. *apparently*) and *il m'est avis que* have evolved towards a function which is solely inferential. Nowadays they express an opinion which reflects a personal judgment based upon the speaker's own experience. It can be a direct experience based on an immediate perception, most frequently visual. The speaker may also rely on empirical facts, on a situation, on present or future events, even on somebody else's words: these are evidence which leads to a conclusion and on which the speaker bases his personal judgment. The link with direct perception no longer exists. Used in spoken language until the 1950s, *m'est avis que* is not in common use nowadays, whereas *apparemment* in its pragmatic inferential use is extremely common.

With regard to *il paraît que*, the Medieval structure *il pert que* marks essentially a direct visual perception. It means *on voit bien que* (Engl. *it can be clearly seen that*). In Preclassical and Classical French (1550 to 1789), *il paraît que* evolves also towards an inferential use, close to Modern French *apparemment*: the speaker relies on a number of facts, which he presents as evidence, to state a conclusion to which he does not entirely commit. He presents this conclusion as plausible, and asserts it weakly. The inferential function of *il paraît que* is still in use in the 19th century. Nowadays, *il paraît que* is only an evidential marker of the type "reported" (Engl. *allegedly*). It indicates that the speaker has acquired the information through a report by somebody else or has picked it up from rumours.

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State representation and dynamic processes: the aorist in -hn in Homeric Greek.

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In the present paper, we show that:

I) The aorist in -hn includes both a stative and a dynamic component: the semantic representation encoded into this aorist, in fact, does not refer to an inherent and permanent condition of the subject, but to a change of state/condition of the subject.

II) The aorist in -hn constitutes a strategy to encode anticausative values; the few Homeric instances of non-anticausative values (i.e., passive, reflexive and bare temporal) are epiphenomena of specific verb semantic features incompatible with the anticausative representation of the event; the combination of stative and dynamic semantic components proper to this type of aorist also accounts for its non-anticausative values. Specifically: **a)** the aorist in -hn encodes the anticausative intransitive member of the causative/anticausative alternation represented in change of state verbs: kaivw "to burn" (tr.) – ejkavh, kahvmenai "to burn (intr.)", *ἄ*gnumi "to break, to snap (tr.)" – *ἐ*avgh, *ἄ*gh, *ἄ*gen "to break, to snap (intr.)", etc. Therefore, it denotes a telic event with no agentive external cause and assigns the affected argument the subject role; **b)** when the presence of agent-oriented specifications (i.e., specifications of verb arguments' animacy, manner of action and/or instruments involved) in the meaning of verbs does not allow the anticausative representation of the event, as both agent and patient are necessarily involved, the -h- aorist takes passive or reflexive values, which perfectly matches the results from crosslinguistic investigations into the causative/anticausative alternation in a typological perspective (Haspelmath, 1987, 1990, 1993; Levin & Rappaport Hovav, 1995; Kulikov, 1998; Lazzeroni, 2004; Ameka & Essegbey, 2007). This happens in three cases: 1. eijlevw "to gather (tr.)" – ejavlh, a[len, ajlhvmenai, ajlh~nai, aleiv" "to gather himself together (under the shield)"; 2. mivsgw, mivgnumi "to join (tr.)" – ἐmivghn, etc. "to join himself to (someone, sexually)"; 3. tuvptw "to hit, to strike (in battle, with a weapon)" – ejtuvph, etc. "to be/get hit, struck"; **c)** in the two cases of atelic verbs (*ῥ*evw "to flow" and caivrw "to rejoice"), the -h- aorist cannot encode anticausative values, because no change of state or degree in the approximation to a telos is included in the semantics of the lexemes. Therefore, the -h- aorist expresses only past tense values: g 455 th'" d' ejpei; ejk mevlan ai|ma rJuvh, livpe d' ojsteva qumov" "its black blood flowed from it and its life left its bones" (Dawe); G 76 Ὣς ἔφαθ', Ἕκτωρ δ' αὖτ' ἐχάρη μέγα μῦθον ἀκούσας "so spake he, and Hector rejoiced greatly when he heard his words" (Murray).

III) The supposed aporia (García Ramón, 2014) whereby the state marker -h- has been integrated into the aorist system can be solved. In fact, the function that we found to be proper to the -h- aorist applies to either present or past tenses. When the injunctive system gave rise to the present/aorist system as a consequence of the grammaticalization of tense (Lazzeroni, 1977,

1984), the -h- formations that did not produce a present class were classified as aorist and, then, acquired also past tense values, besides anticausative values.

IV) The suffix -h- represents a mechanism of the injunctive (and later, aorist) system for encoding state representations besides the perfect/middle system. Significantly, indeed, the -h- aorist: 1. has active endings, 2. is not proper to Homeric *media tantum* verbs, as shown here, 3. rarely coexists with an old perfect, as also shown here.

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In Standard Swedish, it is possible to place two negative expressions in the same (inner) clause (1).

(1) Veronika såg **inte ingenting**.
Veronica saw not nothing
'Veronica saw something.'

In (1), the two negations cancel each other, resulting in a non-negative interpretation of the clause. In several Germanic dialects and vernaculars, such as non-standard British English (Anderwald 2005, Trudgill 2009 etc.), a corresponding clause is however interpreted as negative (2).

(2) Veronica did**n't** see **nothing**.
'Veronica did not see anything.'

The phenomenon illustrated in (2) is known as negative concord (NC), and it has been discussed intensively (cf. Horn 1989, Haegeman 1995, Hoeksema 1997, Giannakidou 2006, van Gelderen 2008, Willis et al 2013 etc.). A common analysis is that NC is caused by a diachronic development, whereby a negation (Neg1) is phonetically weakened and eventually reinforced by a new negative marker (Neg2). In the process, Neg1 changes syntactic status, from phrase to head, and this is the factor that allows an additional negation to appear without causing a double-negative interpretation (cf. Brandtler & Håkansson 2014 for a recent discussion). However, the Scandinavian languages have played a minor role in this discourse, due to the fact that NC has not been observed in traditional studies of Scandinavian dialects (but see Sollid 2006). In this talk, I present NC in four varieties of Swedish, and I argue that these data in some cases are problematic for the Neg-head hypothesis.

NC is present in (at least) four varieties of Swedish that deviate substantially from the standard language. NC is found in Övdalian (3; cf. Levander 1909, Garbacz 2010, Åkerberg 2012), southern Ostrobothnian (4; cf. Ivars 2010), Nylandic (5; cf. Lundström 1939), and in Estonian Swedish (6).

(3) Tjyöpum **int ingger** so kringgt. (Levander 1909:111)
buy1PL not noone so often
'We do not buy any that often.'

(4) **It** ha dåm ju **aldri** ut tåmde förr **i**. (Ivars 2010:250)
not had they well never out those before not
'They never had those [mailboxes] outside before.'

(5) Han fick **int** ändo **inga** straff. (Lundström 1939:154)
he got not still no punishment
'He still did not get any punishment.'

(6) **Äte** hav vi **engan kro** pa Run, å **äte** hav vi **engt kino**. (Lagman 1990:201)

not had we no pub on Runö, and not had we no cinema
'We did not have any pub on Runö, and we did not have any cinema.'

All of the varieties that have NC branched off from Swedish during the Middle Ages, and one might presume that NC therefore is to be seen as an archaism. However, NC *cannot* be attested in Old Swedish! Although there are traces of double negations, and possibly NC, in Old Norse (cf. Eythórsson 2002, Brandtler & Håkansson 2014), such constructions are unattested in Old Eastern Scandinavian (Old Swedish, Old Danish, Old Gutnic). Considering that the Old Swedish negation *eigh* appears to be a syntactic head (Brandtler & Håkansson 2014), the absence of NC is surprising, especially since *eigh* is replaced by new negations during the 16th century; both the head status of *eigh* and the shift to a new set of negations infer that NC would be an expected step in the development, given the Neg-head hypothesis. Furthermore, NC was present in Old High German (Langer 2001), Old Low German (Hoeksema 1997, Breitbarth 2013), and Old English (Jespersen 1917, Trudgill 2009), but it was weeded out from the standard languages by prescriptive grammarians. NC in modern West Germanic vernaculars and dialects are thus clearly archaisms, unlike NC in Övdalian etc.

In this talk, I will discuss possible diachronic explanations for the presence of NC in these four varieties of Swedish, and I will also consider the syntactic features of the Estonian-Swedish modal verb *mike* ('may-not'), which does not trigger NC, although a cliticized negation has been incorporated.

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The Diachronic Development of Subject Marking in Piaroa (Sáliban)

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Piaroa [ISO 693-3: pid] is spoken on both sides of the Colombian-Venezuelan border by approximately 15,000 people (INE, 2013). The language is a member of the Sáliban family and is most closely related to Mako [wpc]; the third member of the family is Sáliba [slc] (see Author, accepted). Based on primary data for Mako and Piaroa from the author's own fieldwork, this talk explores the origins of the highly complex Piaroa subject marking system described in the published sources on the language.

In the present and past tense, the subject of a verb is marked via a suffix (1): *-sɑ̃̆* for first person, *-hɑ̃̆* for second person and -∅ for third person. In addition to this marking, feminine forms are marked with the feminine classifier *-œhu*. In future tense, however, subjects are doubly marked. In addition to the suffixes in the forms in (1), each form has an additional prefix (2) or suffix (3) depending on the verb; these two other sets of subject affixes vary for both person and number. Notice that the additional suffix occupies a position immediately after the verbal root while the first set of suffixes comes after the inflected form.

Such a complex system raises multiple questions regarding its origin and development. Firstly, why are subjects marked twice in the future? Secondly, what motivates the split observed in the marking with additional prefixes and suffixes in the future? And lastly, which of the two systems is the oldest and which one is innovative? Comparative data from Sáliba and Mako provide the answers to these questions.

In both Sáliba and Mako, all subjects are marked with either a set of prefixes that immediately precede the verb root (4-5) or a set of suffixes that immediately follow the verb root (6-7). This system of two sets of subject affixes is reconstructable for Proto-Sáliban (Author, accepted) and must therefore have been inherited from the common ancestor of these three languages. Mako data (8-9) suggests that it is the verb's phonology that accounts for the split: verb roots that end in a consonant take a prefix; those that end in a vowel take a suffix. So, if the subject prefixes/inner suffixes were inherited from Proto-Sáliban, what is the source of the Piaroa subject markers that come at the end of all verbs (i.e., *-sɑ̃̆* for first person, *-hɑ̃̆* for second person and -∅ for third person)?

I argue here, based on Mako data, that these markers are in fact old copular suffixes that were extended to verbal predicates in habitual aspect and once they entered the verbal predicate domain they were further extended to all tense/aspect combinations.

Identity constructions in Mako involve a nominalized (by means of a classifier) verb form and a copular suffix, which varies for person: *-tsa* for first person (10), *-ha* for second person, and -∅ for third person (11). The Mako copular construction is also used in verbal predicates with habitual aspect: In (12), the verb 'stay' takes a prefix for 3SG.MASC and a tense suffix; in (13), person is marked with a -∅ and gender with the masculine classifier and there is no tense morphology. The semantic basis for this extension seems clear: *someone who is a worker* is *someone who works all the time/habitually* or viceversa.

Notice that the Mako copular suffixes are cognate with the Piaroa subject suffixes in (1) and that feminine forms are also cognate (cf. *-ahu* (1) and *-uhu* (10)). This evidence suggests that the new paradigm of subject affixes in Piaroa has as its origin a set of three copular suffixes and that sentences in habitual aspect must have been the context into which the copular suffixes entered the verbal predicate domain; their use in other tense/aspect combinations being a further extension of the construction.

This research not only constitutes an important contribution to the description of Piaroa and expands our understanding of complex systems of verbal person marking and their possible sources.

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Person	Masculine		feminine	
1SG	*ãdĩtɨ-**sæ̃***	'I (male) work'	*ãdĩtɨ-**æhu-sæ̃***	'I (female) work'
2SG	*ãdĩtɨ-**hæ̃***	'you (male) [SG] work'	*ãdĩtɨ-**æhu-hæ̃***	'you (female) [SG] work'
3SG	*ãdĩtɨ*	'he works'	*adit-**æhu***	'she works'

(Mosonyi, 2000:662)

Person		
1SG.MASC	***ʧ-**ãdĩt-æ'k^{w}ã-**sæ̃***	'I (male) will work'
2SG.MASC	***k^{w}-**ãdĩt-æ'k^{w}ã-**hæ̃***	'you (male) [SG] will work'
3SG.MASC	*ãdĩt-æ'k^{w}ã*	'he will work'

(Mosonyi, 2000:662-663)

Person		
1SG.MASC	*pæ-**d**-æ'k^{w}ã-**sæ̃***	'I (male) will say'
2SG.MASC	*pæ-**k^{w}**-æ'k^{w}ã-**hæ̃***	'you (male) [SG] will say'
3SG.MASC	*pæ-**ʔ**-æk^{w}ã*	'he will say'

(Mosonyi, 2000: 663)

(1) **Sáliba**
***c**-om-a*
1SG-come-REAL
I come'
(Estrada Ramírez, 2000:695)

(2) **Mako**
***ʧ**-otid-a*
1SG-work-REAL
'I work'

(3) **Sáliba**
*gu-**d**-a*
walk-**1SG**-REAL
'I walk', 'I go'
(Estrada Ramírez, 2000:695)

(4) **Mako**
wahi-t-a
not.know-**1SG**-REAL
'I don't know'

(5) PREFIX-TAKING VERBS
bamat- 'to stop'
deh- 'to light'

(6) SUBJECT-TAKING VERBS
me- 'to fall'
di- 'to scrape'

(7) *ɨkʷɨ* *otid-ab-uhu-**ha***
2SG.PRO work-?-**CL.FEM-COP.2**
'You (female) are a worker'

(8) *ite* *otid-ab-**õ-Ø***
3SG.PRO.MASC work-?-**CL.MASC-COP.3**
'He is a worker'

(9) *mariu-ma* / *tebo-nɨ* ***ɨ̃-h-obe**-ma*
tapir-TOP? woods-OBJ **3SG.MASC**-stay-**TAM**-TOP?
'the tapir, he lives in the woods' (lit. 'the tapir always stays in the woods')

(10) *hõba-ma* *tebo-nɨ* *h-**õ***
that_one-TOP? woods-OBJ stay-**CL.MASC**
'he lives in the woods' (lit. 'he always stays in the woods')

Impersonal passives and non canonical alignment in Italic languages

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In Latin, as well as in other Italic languages, the canonical argument structure of the clause patterns according to a nominative/accusative alignment, since both transitive and intransitive subjects are marked by the nominative case, as opposed to direct objects, which are marked by the accusative case. Nevertheless, several phenomena of non canonical alignment have been identified, which are instead consistent with the existence of a semantically oriented opposition between the nominative and accusative cases in some domains of the Latin grammar (Cennamo 2009, 2011, and references therein; Rovai 2012, 2014, and references therein).

Among others, this pattern surfaces in some passages where the accusative marks the sole argument of an impersonal passive (Pinkster 1992; Cennamo 2011), like (1) and (2):

(1) *praeterpropter uitam uiuitur*
more-or-less life.ACC.SG.F live.IND.PR.3SG.PASS
'Life is lived / one lives life more or less' (Enn. *scaen*. 240/1)

(2) *faciatur* [...] *triclina*
make.SUBJ.PR.3SG.PASS triclinium.NOM/ACC.PL.N
'Let *triclinia* be made' (Petron. LXXI 10)

This talk discusses the Latin data against a common Italic background, with particular attention to similar constructions that are attested in both Oscan and Umbrian texts, like (3):

(3) *sakrafír* [...] *últiumam kerssnaís*
consecrate.SUBJ.PF.3SG.PASS last.ACC.SG.F banquet.ABL.PL.F
'The last (*iovila*) is to be consecrated with banquets' (Vetter 1953: n. 86)

The major aim is to elucidate whether such similarities are a matter of shared inheritance, parallel independent developments, or areal convergence.

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Old English verbal prefixes: their effects on the transitivity of labile morphological causatives

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The present study is part of an ongoing project on the valency of –jan causative pairs in Old English. This Proto-Germanic suffix was added to some strong verbs to form a derived causative. In this study, I focus on 13 –jan pairs, including bugan-bigan or meltan-myltan which undergo the process known as syntactic merger (García García 2012). With this term this author refers to cases in which one or both members of the inchoative-causative pair take on a further valency value that originally belonged only to its counterpart. This process results in a labile verb, i.e., a verb that can function both as intransitive or causative with no formal marking. As is common with many Old English verbs, the verbs under study frequently occur preceded by prefixes. The main objective of this paper is to analyze how these prefixes affect or interact with the notion of transitivity and causativity. On the one hand, the extent to which prefixes function as causative markers, reinforcing or even cancelling the meaning of the –jan suffix, has been assessed. On the other, the degree of transitivity of causative clauses with and without prefix has been evaluated. The main methodological tool I made use of while assessing the transitivity of a clause are the parameters that conform what Hopper and Thompson (1980: 252) call cardinal transitivity. Results support the idea that there exist two main groups of prefixes according to the effects they have on the transitivity of the clause. On the one hand, the first group does not seem to make the transitivity of the clause higher, namely a- and ge-. Even if it has been argued (see Bosworth and Toller 1898 and Hiltunen 1983: 48-50) that these prefixes present some shades of meaning such as perfective or transitivizing, my data do not support this view. Additonally, as mentioned in Hiltunen's work, the variation between the unprefixed forms and forms with a- or ge- is higher than in the case of the second group of prefixes, something which could point to the semantic emptiness of these prefixes. On the other hand, the second group of prefixes, represented in my data mainly by be- and for- do show certain effects what transitivity is

concerned. More precisely they seem to increase the transitivity of the clause by adding certain parameters such as marking the affectedness of the object, a telic aspect and the consistent inclusion of a second participant in cases where it would not be historically expected, namely in the non-causative member of the causative pair. Moreover, they contribute to a high degree of lexicalization in some of the verbs to which they are added, as is the case of bugan. Not only does the meaning of the verb change, this process also contributes to the collapse of the morphological causative construction since in the case of highly lexicalized verbs only one of the members of the causative pair is regularly attested.

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Lessons from Neapolitan: Vocalic Weakening as an Alternative to Full Syncope in the Path from Latin -MIN- to Modern Spanish *-mbr-*

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Already evident in the *Appendix Probi* of the 3rd or 4th century CE, one of the earliest phonological changes that began to take hold between Latin and early Romance was syncope, or complete loss of post-tonic vowels, particularly in the environment of a liquid (e.g., VETULUS NON VETLUS). An overall scan of the Romance languages today reveals that this process continued to varying degrees depending on the language, with Northern Italian proposed to be the least radical with its conservation of many of the original unstressed Latin vowels (e.g., HOMINES > [wo'-mi-ni]), Neapolitan occupying a middle ground with a weakening to schwa (e.g., HOMINES > [wo'-m:ə-nə), and Spanish as perhaps the most radical, extending the early trend of syncope in post tonic vowels beyond the realm of liquids to other such environments as nasals (HOMINES > [om'-bres]). It has also been suggested that the loss of post tonic vowels in Spanish has in turn set in motion a number of other phonological changes such as denasalization, rhotacization, and epenthesis, which, as illustrated in (1), lead to the modern Spanish sequence *-mbr-*:

	LATIN		Traditionally Proposed Ibero-Romance				Modern Spanish
(1)	HOMINES	>	HOMNES	>	HOMRES	>	*hombres*

The purpose of this paper is to propose a new analysis for the change from Latin -MIN- to Spanish -*mbr*- by suggesting an alternative process to that of complete loss of post-tonic vowels in the evolution of words like HOMINES. Rather than complete syncope, as previously suggested, the new analysis involves instead the weakening or **incomplete reduction** of the post tonic vowel, making the Ibero Romance form more akin to the form in Modern Neapolitan. The Motivation for this alternate view includes: 1) words in Latin already with the -MN- sequence which after a process of assimilation -MN- > -NN-, ultimately yielded -ñ-, and NOT -*mbr* (e.g., AUTUMNUS > otoño). 2) words in Latin with the -MIN- sequence that yielded -ñ-, and NOT -*mbr* (e.g., DOMINUS > dueño). As 2) suggests, there were in fact, not one, but two potential paths for words that originally entered the Peninsula as -MIN-, namely, 1) a more common one that would ultimately yield -*mbr*, and 2) a less common one that would ultimately yield --*ñ*-.

The study concludes with a proposal that words like DOMINUS and HOMINES, despite similarity in form, took different paths, and suggests that HOMINES might not have actually sounded quite like what we think, that is, a fully reduced HOMNES with full post tonic vocalic loss, but rather more like an intermediate version, such as Neapolitan uommene [wo'-m:ə-nə] with a weakened version of the post tonic vowel. If this were the case, the resultant sequence of consonants would not have been -MN but rather -M^{ə}N-. In this new analysis, the intermediate stage between HOMINES and HOMRES, which was previously characterized by full post tonic vocalic loss, is now instead simply a reduction to interconsonantal *ə* which might have been sufficient to prohibit the normal path to palatalization (-MN- > -NN- > *ñ*) by breaking the sequence -MN- and preventing progressive assimilation to take place as it did for AUTUMNU(S) or DOMINUS.

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Where do antipassive constructions come from? A study in diachronic typology

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Introduction. In typology and historical linguistics, the sources of antipassive constructions, i.e. constructions in which the patient of a transitive verb is either left implicit or realized as an oblique complement, have attracted less attention than the sources of passive and related constructions. Such a gap has various reasons:

(i) antipassive constructions are rarer than passives cross-linguistically; in the WALS database, only 48 languages out of 194 have an antipassive (24.74%; Polinsky 2013), whereas 162 out of 373 have a passive construction (43.43%; Siewierska 2013);
(ii) there is no sufficient historical documentation to reconstruct the diachrony of grammaticalized antipassives; only a few languages with an antipassive among those included in Polinsky (2013) are spoken in Europe (Basque, some Nakh-Daghestanian languages);
(iii) there are constructions that perform the same functions as antipassives but are usually labelled with a different terminology in grammars (including, but not limited to, depatientive, detransitive, deobjective etc.), especially in languages with non-ergative alignment. These constructions are generally not taken into account when dealing with the diachrony of antipassive constructions, although they might provide crucial insights into the diachronic pathways leading to their emergence.

The aim of this paper is to provide a comprehensive overview of the main sources of antipassives and related constructions and to propose a set of diachronic scenarios through which such constructions might have come into being.

Language sample and methodology. The *core sample* of the present study is the 48-language set from Polinsky (2013) in which an antipassive construction is attested. In not all of these languages, the (possible) sources of the antipassive construction are explicitly mentioned/discussed in the grammatical descriptions available. In order to overcome this methodological difficulty (which is, by the way, inherently connected to any attempt at a diachronic typology of a given construction type), our scrutiny of the literature has led to the identification of a further set of 40 languages (*non-core sample*) displaying instances of constructions labelled variously and performing the same functions of antipassive constructions (or a subset thereof). These constructions provide useful comparative data when reconstructing

the sources of constructions in the core sample, as they have a clear (or at least reconstructible) etymology and can be considered as incipient or emergent antipassives, whatever label the grammatical description assigns to them. Furthermore, languages in the non-core sample have a documented history that allows us to sketch at least some of the stages of the reconstructed diachronic paths.

Results. Besides a few minor diachronic pathways, the cross-linguistic survey allows us to single out the following set of recurrent sources of antipassive constructions:

a) **periphrastic constructions in which a verb meaning 'do' is involved**: one such example is the Soninke (Mande) antipassive suffix *-ndì*, traced back by Creissels (2014) to a Proto-West-Mande verb **-tin* 'do'; comparative data in the non-core sample show that combinations of 'do' verbs with nominalized VPs may perform a patient-demoting function (cf. (1) and (2)); in some cases VP NOMINALIZATION + 'DO' combinations show symptoms of incipient constructionalization (e.g. lack of the article in (2));
b) **denominal verbs from nominalized VPs**: Jacques (2014) reconstructs a process leading to an antipassive construction in Japhug Rgyalrong that implies two stages: (i) a transitive verb is nominalized into an action nominal; (ii) the action nominal is turned into a verb by a denominal construction deriving intransitive verbs. In Latin, there is a class of verbs formed by means of a set of suffixes (*-tāre*, *-sāre*, *-itāre*) based on the stem of the verbal noun. These verbs (named "frequentative" verbs) have the function of expressing repeated action and "imperfective aspect, especially with a continuous or habitual interpretation" (Viti, forthcoming: p. 9; cf. *cantāre* '(continue to) sing' vs. *canere* 'sing (a song)'; *pulsāre* 'beat around' vs. *pellere* 'beat (once)', etc.). Patient demotion is involved in most cases in which these verbs are used (cf. (3));
c) **reflexive constructions**, possibly through a "reciprocal" stage (Creissels & Nouguier-Voisin 2008): this is the most common source of antipassives in Australian languages (Terrill 1997), and is also attested in Romance and Slavonic languages (Janic 2013);
d) **generic arguments in object position**, such as the *ti-* and *ta-* prefixes in Nahuatl (Langacker 1977: 46) and the incorporative antipassive in Jacaltec (Grinevald Craig 1979: 7); incipient antipassive-like constructions involving generic nouns such as *man*, *people* and *thing* are also attested in the non-core sample (cf. the patient-demoting function of *gjë* 'thing' in Albanian, Buchholz & Fiedler 1987: 153);
e) **agent nouns (in combination or not with copulas)**, as in Cariban languages, where the reflexes of the Proto-Carib reconstructed subject nominalization **t-V-ce-mi* are infused with an antipassive-like generic/habitual semantics (Gildea 1998: 233ff.).

The survey also shows that the cross-linguistic variation of antipassive constructions may reflect the features of their respective source constructions, i.e. that both the morphosyntactic marking of the demoted patient in the target construction and the productivity/morphosyntactic idiosyncrasies of the target construction may have an ultimately historical explanation.

Examples

(1) *If your mum doesn't* ***do the cooking*** *at home, who does it?* (British National Corpus)

(2) *a* *ciascuno* *della* *nostra* *Arte* *di* *potere* ***fare*** ***recata***
to each of.ART our Guild to be.able.to do.INF bring.NMLZ
di *panni* *oltramontani*
of clothes ultramontane
'(It is allowed) to each member of our Guild to import clothes from France.' (lit.: 'to do the bringing of ultramontane clothes') - Old Italian (Tuscan; *Statuto dell'Arte di Calimala* 1334)

(3) *ad caput eius symphoniacus cum minimis tibiis accessit et … toto itinere* ***cantavit*** (Petronius, 28)
'a musician with a tiny pair of pipes approached him, and … played the whole way.'

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Ablaut in armenian nasal declension

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This study concerns an analysis of stems alternation in Old Armenian nasal declension within word-and-paradigm morphology and comparative Indo-European morphology. It intends to demonstrate that the alternation among full, *o* and zero ablaut grades displayed by one of the Armenian nasal paradigms is not only found in a central position within Armenian nominal declension, but can also be ascribed to Indo-European morphology. Therefore, a formal property of the inflectional paradigm (its morphomic organization) is investigated as a means to historical-comparative reconstruction.

In Armenian nasal declension, ablaut alternation in stems within inflection is displaced in three main patterns (we express only the relevant positions of the paradigms; for data s. Jensen 1959: 55-56; Schmitt 1981: 102-4; Olsen 1999: 115-34):

	NOM/ACC.SG	GEN/DAT.SG	NOM.PL	GEN/DAT/ABL.PL
Pattern A	*bern* 'burden' /bɛrːn/	*berin* /bɛrˈːin/	*berink* /bɛrˈːinkʰ/	*beranç* /bɛrˈːant͡sʰ/
Pattern B	*atamn* 'tooth' /aˈtamn/	*ataman* /ataˈman/	*atamownk* /ataˈmunkʰ/	*atamanc* /ataˈmant͡sʰ/
Pattern C	*harsn* 'bride' /harsn/	*harsin* /harˈsin/	*harsownk* /harˈsunkʰ/	*harsanc* /harˈsant͡sʰ/

Internal arguments, based on the structure of Armenian inflectional paradigms (within word-and-paradigm morphology; Matthews 1991; Maiden 1992; Aronoff 1994; Stump 1998; Pirrelli – Battista 2000; Thornton 2005), lead to intend Pattern C as the basic one: it is the more complex and the more relevant one in the overall Armenian declension; it is possible to derive all the less complex patterns (with two or three inflectional stems, in nasal, *l*- and *r*- stems) from the more complex one (with four inflectional stems: *-n, in-, an-, own-*) through a simple operation: deletion of partition classes of paradigm (and never by the creation of new partition classes).

Whatever should be the remote origin of these three patterns (a discussion on this topic is offered in Olsen 1999: 115-26; s. Mahé 1998-2000 for synchronic function of *own*- plurals in Old Armenian), all of them find comparative basis in Indo-European perspective: not only Pattern B, which displays the zero-grade in all the traditional "weak cases" (gen/dat.sg. and gen/dat/abl.pl), but also Pattern A and Pattern C. The latter has been considered by many scholars as a strong archaism in Armenian nominal inflection, reflecting inherited conditions (Meillet 1936: 78; Godel 1975: 98-99; Hamp 1988; Belardi 2006: 145).

Considering the correspondences of Armenian ablaut grades with PIE ones (PIE *-*en*- > Arm. -*in*-; PIE *-*n̥*- > Arm. -*an*-; PIE *-*on*- > Arm. -*own*- /un/), comparative arguments can be summarised:

- alternation between full grade and zero grade (Pattern A, C) can be compared to Old Avestan sg. forms of neuters with full grade (instead of zero grade) like *cašman*- 'eye', gen/abl.sg *cašmāṇg*, *rāzar/n*- 'rule' gen/abl.sg *rāzāṇg* (< **əŋh* < **-an-s*; with full grade in the suffix and zero grade in the ending; s. Hoffmann – Forsmann 2004: 143); isolated forms of zero grade (instead of full grade) in dat. pl. are attested in Greek: e.g. φρήν 'midriff, heart, mind',□dat.pl. φρασί; ἀγκῶν 'elbow' dat.pl. ἀγκάσι□(Schwyzer 1939: 486; Chantraine 1984: 82); for a similar phenomenon in Germanic, s. irregular Gothic nouns like *aba* 'man, husband', gen.pl *abne*, dat.pl *abnam*; Goth. *auhsan*- 'ox', gen.pl *auhsne*, dat.pl *auhsum* (<**uhs-un-miz* < *-*n̥*-) (Ramat 1986: 97-98);

- alternation between *e*-grade and *o*-grade (Pattern C) find a strong basis of comparison in Germanic nasal declension (Kieckers 1960: 119-21; Godel 1975: 98-99): e.g. Goth. *guma* 'man', gen.sg *gumins* and dat.sg *gumin* (< *-*en*-), but nom/acc.pl *gumans* (< *-*on*-).

Moreover, Old Indo-Iranic data can lead to the reconstruction of a further Indo-European ablaut pattern (corresponding to the ablaut hysterodynamic one), which maybe is also attested in Hittite nasal declension (s. Oettinger 2003; Hoffner - Melchert 2008: 111-12; but cf. for a different position Rieken 2004).

These facts allow to consider a late stage of PIE derivation in which the alternation of different ablaut stems within inflection, can not be synchronically predicted neither on the basis of phonological conditions, nor by reference to morphosyntactic categories (e.g. case, number); instead, it can be intended as a mere morphological function of paradigms organization. In such a context, a central role is played by an ablaut pattern (corresponding to the illustrated Pattern C), displaying at least three different ablaut grades (full, zero, *o*), which is actually attested in Armenian and Germanic.

Moreover, the study intends to display that inflectional paradigms, and their internal organizations, can be considered as relevant objects within historical morphology, as well as the affixes (or, more generally, morphological exponence) and the grammatical categories.

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Enclitic *–ma* "but"/ *–ya* "and" in Hittite: losing extraordinary syntax behaviour

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We propose to discuss the development of syntax of two enclitic conjunctions *–a*/*ma* "but"[27] and *–ya* "and" in Hittite (Indo-European language spoken in 18–12 cc. BC, Anatolian group). The two enclitic conjunctions are standardly assumed to have identical syntactic behaviour (Hoffner, Melchert 2008).

In Old and Middle Hittite period *–a*/*ma* and *–ya* show very peculiar distribution in the clause, see for *–a*/*ma* (Kloekhorst 2014: 605). In most of their functions[28] they tend to cliticize in Wackernagel position, as consistent with other enclitics in Hittite.

(**1**) OH-MH/MS (CTH 262) IBoT 1.36 obv. i 69–71

[27] Its allomorphs are distributed as C=*a*/ V=*ma*, with the scope of *–ma* gradually extended, and for the Middle Hittite period *–a* being replaced by *–ma* in postvocalic position as well.

[28] Adversative (*–ma*) and coordinating (*–ya*) functions with sentential scope, topicalising (*–ma*) (Rieken 2000) and additive focusing (*–ma*) (Melchert 2009) and (*–ya*) with narrow scope.

LÚ.MEŠ*MEŠEDI=**ma*** É*arkiw-i* *tapušza* ZAG-*za* *tie-nzi*
bodyguards=but passageway-LOC.SG alongside right-ABL stand-3PL.PRS
"But the bodyguards stand to the right alongside the passageway"

But they are delayed to non-Wackernagel second position by a certain heterogeneous set of words, *nu, mān, kāš(m)a, našma, namma, kui-* (CHD L-N: 97–99, Hoffner, Melchert 2008: 396; Kloekhorst 2014: 605), as in:

(2) OH-MH/MS (CTH 262) IBoT 1.36 rev. iv 23
mān=ašta GIŠGIGIR-*za=ma* ***kuwapi*** *anda* *pai-zzi*
if=LOC chariot-ABL=but where into go-3SG.PRS
"If, however, he goes into **some place** by chariot, …"

We argue in the talk that it is the same set that is not counted as the first position for certain other constituents that otherwise show a second position constraint[29]. These are indefinite pronouns, relative pronouns in determinate relative clauses and some subordinators like *kuit*. See (**2**) above where both *–ma* and *kuwapi* "where" (functioning as an indefinite pronoun) follow the second word in the clause, not the first one. In the recent research, e.g. (Huggard 2014) and (Kloekhorst 2014:616), it has been suggested that the delaying group consists of unstressed words. But we argue that indefinite pronouns, relative pronouns, and some subordinators, on the one hand, and the delaying group, on the other, have nothing to do with lack of lexical stress.

The assessment provides the necessary starting point for the properly diachronic analysis. As is well known (see, e.g., (Kloekhorst 2014) for *–a/ma*, in New Hittite *–a*/*ma* and *–ya* start being hosted by the majority of the delaying set of words (but not by *nu*). In the meanwhile, other second position constituents do not start being hosted by this set. Thus what constituted in Old and Middle Hittite the unitary non-Wackernagel second position is being split: enclitic *–a*/*ma* and *–ya* became ordinary second position Wackernagel enclitics whereas stressed second position constituents preserved their aberrant behaviour, as in:

(3) MH/NS (CTH 264.A) KUB 13.4 rev. iii 68
mānn=a=za MUNUS-*i* ***kui-š*** GAM-*an* *šeš-zi*
if=and=REFL woman-DAT.SG which-NOM.SG.C down sleep-3SG.PRS
"Also, when **someone** goes to sleep with a woman"

It is noteworthy that the enclitic *–(m)a*, but not *–ya*, attests a curious intermediary stage in the process of this shift from exceptional to regular syntax (from cliticising to the second stressed word in case of the delaying set, to always cliticizing to the first stressed word). As in the following example, see (Kloekhirst 2014:614) for more data, there are cases of *–ma*'s doubling: one *–ma* occupying the second Wackernagel position like an ordinary Wackernagel clitic, the position determined by phonological reasons only, and another one occupying the delayed position:

(4) NH/NS (CTH 89.A) KUB 21.29+ rev. iv 8-9
*mān=**ma**=[ka]n* UN-*aš=ma* *kuiški* *ŠA* URU-*LIM*
if=but=LOC person-NOM.SG.C=but some.NOM.SG.C of city

[29] Second position is one of several possible positions for these constituents. The other most common one is preverbal position. We do not deal with it in the present lecture.

ANA LÚ$^{MEŠ\ [U]RU}$*Gašga* *kuiški* *anda* *dammek-tari*
to people Gasga somebody.NOM.SG.C in join-3SG.PRS.MED
"**But** if any person of the city – anybody – joins people of Gasga, …".

Exx. like (**4**) can be best interpreted in the minimalist paradigm, see, e.g. (Bošković 2001), as the simultaneous spell-out of two copies of *–ma*, the highest one and the lower one. This very clearly shows that delayed *–(m)a* was structurally determined, i.e. it occupied Force in any type of clause with *nu*, *mān*, etc. sitting higher whereas *–a*/*ma* cliticizing to any first stressed word is phonologically determined, like any other Wackernagel enclitic.

However, the account leaves unexplained the fact *–a*/*ma* and *–ya* continue to be delayed by the only unambiguous Hittite proclitic — *nu* — even in New Hittite. This is the only member of the delaying group that completely resisted hosting *-a*/*ma* and *–ya* when *mān* etc., i.e. stressed constituents, started hosting them. I.e. *–(m)a* and *–ya* behave differently from other Wackernagel enclitics even in New Hittite material.

One explanation of this behaviour is that *–a*/*ma* and *–ya* can still cliticize only to the position which is compatible with their sentential functions (adversative and coordinative). *Nu* as the sentence connective with void semantics marking information structure progression (Widmer 2009) is apparently not compatible with them whereas lexical subordinators like *mān* «if» or sentence adverbials like *namma* «then» are. Cf. (Agbayani, Golston 2010).

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Genitives and (pseudo-)partitives in the history of Romance: a parametric account for cross-linguistic evidence

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Genitives. A considerable group of instances of prepositionless genitive is attested in old and (Gianollo 2005) modern Romance ('Juxtaposition Genitive' in Delfitto-Paradisi 2009) (1-5).

From a typological perspective, different types of genitival markings occur cross-linguistically. Leaving possessives aside, genitive is realized by: (a) inflectional ending (e.g. in Classical Latin); (b) adpositional phrase (e.g. in most Romance varieties); (c) affix (e.g. word final affix *-s* in German and *-i* Arabic; phrase-final -'*s* in English); (d) head-marking (e.g. Hebrew). I will bring fresh evidence for the old and modern prepositionless genitive which thus witnesses that it is possible to recognize a further genitival type: (e) no overtly marked, i.e. non-adpositional and not inflected.

Crosslinguistically, genitive must always be identified in a paradigmatic opposition with respect to other Cases, i.e. it requires some dedicated morphological marking or phrasal configuration. If the genitive mark is not overtly realized at a sensorimotor level (type (e)), then it must be assigned and licensed thought other strategies.

A representative sample of the relevant cases of Romance unmarked genitives is reported below (genitive is underlined):

(1) OLD FRENCH

i. *pur amur Alexis* ['Vie de Saint Alexis']
for love Alexis

ii. *la Mort le Roi Artu* ['Mort Artu']
the death the King Artu

(2) OLD ITALIAN

i. *il nodo Salamone* [Dante]
the knot Salamone

ii. *per lo dicto Seneca* ['Scripto']
for the quote Seneca

(3) COLLOQUIAL CASTILIAN

i.*el/un hijo el/un/los ministro(s)*
the/a son the/un/the$_{PL}$ minister(s)

ii. *una cesta harina/manzanas*
a basket flour/apples

(4) ASTURIAN (Cabo Peñas)

i. *la casa 'l medicu* the house the doctor

ii. *un carru yerba* a cart herb

iii. *un cistu cereces* a basket cherries

(5) ITALIAN DIALECTS

i. *a casa granna u sinnəcə* the house big the mayor (North Calabrian)

ii. *u fiascə u vinə jancə* the flask the wine white

iii. *canna la cemmeneja* cane the chimney (Apulian)

According to Longobardi's (2001) representation of DP, two main types of syntactic configuration can be cross-linguistically detected: a *free* Gen(itive), which is iterable, and is realized via adposition or inflection; and a *functional* one, which is intrinsically unmarked (neither inflected nor adpositional), and corresponds to two fixed positions in the DP structure. The *functional* type is manifested by a pre-adjectival genitive (Gen1) and a post-adjectival one

(Gen2). Since every language exhibits a strategy to encode genitive, if its marking is not perceivable at the sensorimotor level, then the genitive must occur in one of the two mentioned functional positions, the selection of which depends on the landing place of N-movement (Giorgi&Longobardi 1991).

Proposal. Following Longobardi *et al*. (2013)'s work, my assumption is that the cross-linguistic distribution of *free* and *functional* genitives can be mapped trough parameter settings. Previous investigations showed that CL exhibits all the three available configurations (Gianollo 2005). In LL the possibility of a *free* Gen is ruled out, since the genitive surfacing in postnominal position does not satisfy the requirements for *free* Gen to be assigned. Arguably, this is a case of parametric resetting (as marked in bold in the Table A) in the history of Latin which accounts for a serious typological divide between the Romance varieties and their common ancestor.

Table A	*free* Gen	*functional* Gen	
		Gen1	Gen2
Classical Latin	+ (inflectional)	+	+
Late Latin	-	-	+
Old Romance	+ (prepositional)	-	+
Modern Romance	+ (prepositional)	-	+*

(Pseudo-)partitives. Within the expression of Possessor across Romance, a peculiar construction concerning the post-nominal possessives is detectable among central and southern Italian dialects. When the Head Noun DP is indefinite (including numeral quantifiers) (6-i,ii) or headed by a demonstrative (6-iii), the possessive is licensed within a definite preposition (*di*) phrase whose phi-features matches the morphological exponence of the HN *in toto* (6-i, iii) or only for gender (setting PL as default; 6-ii):

(6) i. *na cuggina d-a mija*
a cousinFSG of.theFSG my
'a cousin of mine'

ii. *tre casi d-i tua*
three housesFPL of.theFPL your
'three houses of yours'

iii. *su libbru d-u tua*
this bookMSG of.theMSG your
'this book of yours'

[north-western Calabria]

Towards a structural interpretation. The peculiar structure of the possessive inserted in a non-definite DP, as realised in (6-i), recalls for some aspects of distribution and definiteness checking the 'possessive article' configuration (*al*+genitive) of modern Romanian:

(7) i. *aceste cărţi ale profesorului*
these booksF AL.FPL professorDEF.GEN
'these books of the professor's'
(Dindelegan 2013:265)

ii. *nişte prieteni ai mei*
some friendsM AL.MPL myMPL
'some friends of mine'

Following the analysis outline of LANGELIN's research group of York University (2015), I will propose that the definite /de/ of (6) is a *linker* between two DPs involved in a complex but consistent mechanism of genitive case licensing.

Results. Testing the Gen Phrase position with respect to N and Adjectives suggests that the prepositionless genitive of modern Romance is to be identified as an instance of Gen2, a continuation of Old Romance Gen2, which is in turn interpreted as the outcome of LL post-adjectival *functional* genitive (Table A). Another peculiarity of the DP structure of Italian dialects, i.e. the /di/ phrase licensing the possessive in a non-definite DP, comparable to the AL-constructions of Romanian, extends the typological possibilities of genitive case checking across Italo-Romance.

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Finite and non-finite complementation in German: competition or co-evolution?

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This paper investigates the development of the grammatical system of complementation in German, focusing on the emergence and spread of three types of complement clauses in context of manipulative and directive complement taking predicates (CTP): object-controlled *zu* 'to'-infinitives (1), verb-final *that*-clauses (2), and embedded verb-second clauses (3):

(1) *Er bittet mich, ihm zu folgen.*

	he	ask.3SG.PRES	me.ACC		him.DAT	to follow.INF
(2)	*Er*	*bittet*	*mich,*	*dass* *ich*	*ihm*	*folge.*
	He	ask.3SG.PRES	me.ACC	that I	him.DAT	follow.1SG.PRES
(3)	*Er*	*bittet*	*mich,*	*ich* *soll*	*ihm*	*folgen.*
	he	ask.3SG.PRES	me.ACC	I shall.1SG.PRES	him.DAT	follow.INF

The common practice in diachronic research, particularly in those based on available corpus evidence, is to concentrate on one particular form, to trace its development back to its origins, and to explore the relevant factors and mechanisms behind observable changes. Studies dealing with possible paradigmatic interactions between two or more linguistic forms through time are less widespread, a remarkable exception being research on analogy and its role in language change. This contrasts to the common practice in synchronic grammatical descriptions where paradigmatic relations between forms are given careful attention.

Form the diachronic perspective, the intuitive idea of two competing variants, of which the newer one is most likely to win and to replace the older one, seems to generally dominate the picture. Specifically, it has been usually taken for granted that the German *zu* 'to'-infinitive is such a new variant; the traditional view holds that it developed at the expense of two older forms, i.e. the bare infinitive and the finite *that*-clause. This paper suggests that the picture of two or more competing variants from which one is bound to win over the other(s) is too simple to describe what is really going on in language change.

To demonstrate this, a parallel diachronic analysis has been conducted, based on corpus data from Middle High German to the present day. The range of the structures under analysis was restricted to manipulative and directive CTPs. By this restriction, it was ensured that the complement types occur in more or less the same contextual environments and thus share more or less the same semantics. The complementation patterns of the following nine CTPs were analyzed: the manipulative verbs *zwingen* 'force', *nötigen* 'force, coerce', and the directive verbs *bitten* 'ask, request', *mahnen* 'urge', *befehlen* 'command', *empfehlen* 'recommend', *raten* 'recommend, advise', *gebieten* 'demand', *erlauben* 'allow'. The main findings of the corpus study may be summarized as follows:

- In the earliest stages, *zu*-infinitives and *that*-clauses follow almost identical paths of change, whereby two different source structures and hence two different paths may be distinguished:

(i) In the context of manipulative CTPs, both the *zu*-infinitive and the *that*-clause develop from purpose adjuncts to complements;

(ii) In the context of directive CTPs with dative recipients, i.e. *befehlen* and *empfehlen*, both the *zu*-infinitive and the *that*-clause are reanalyzed from postnominal attribute (clauses) to complements. Importantly, in both cases the forms influence each other in a positive way, so there is no competition between them at this stage.

- In the following stages, the *zu*-infinitive gradually gains ground and spreads to become the typical complement type of manipulative and directive CTPs. However, two different paths may be observed here as well:
(i) Manipulative CTPs very quickly loose *that*-complements and promote *zu*-infinitives to their preferred complements. The forms indeed compete with each other, and the *zu*-infinitive wins.
(ii) The gain of *zu*-infinitive complements if directive CTPs cannot be however fully attributed to the loss of *that*-clauses, which remain fairly frequent until the 17th century. No direct competition between the two forms is suggested by the corpus data. Rather, the amount of sentential complements increases steadily from Middle High German until ca. 17th century.

- The verb-second complement clause is the last to evolve, first unambiguous cases attested from the Early New High German period onwards. It appears only after directive, never after manipulative CTPs, and obligatorily contains a modal verb or a subjunctive verb form. The emergence of verb-second clause embedded under directive CTPs follows the general tendency of these verbs to increasingly prefer sentential complements mentioned above.
Additionally, the emergence and spread of embedded verb-second clauses is part of a more general process, i.e. the establishment of the paradigm of so called 'reported speech'-complements. Due to the tight paradigmatic relationship of all three types of complements of directive CTPs, *that*-clause and the *zu*-infinitive are also interpreted as 'reported speech'-complements, namely as reported requests and commands.

The results of the corpus study strongly suggest that, at the more general level above individual constructions, two different developmental lines within the system of sentential complementation may be distinguished. First, due to their previously shared purposive semantics *zu*-infinitives and *that*-clauses develop into complements of manipulative verbs. Later, the *zu*-infinitive becomes dominant, whereas *that*-clause disappears from these contexts. This is the line of development which is fully compatible with the grammaticalization scale proposed by Haspelmath (1989).

Second, and at about the same time, *zu*-infinitives and *that*-clauses in context of certain directive CTPs are reanalyzed as complements. This change cannot be described in terms of grammaticalization; the reanalysis require neither that the *zu*-infinitive or *that*-clause have purposive semantics nor that they function as adverbial clauses (see e.g. Bock 1931, Ebert 1976). Later, this development is followed by the establishment of so called 'reported commands and requests'-complements.

This suggests that what at first sight may seem a mono-directed development of an expression, say the grammaticalization of the *zu*-infinitive, may turn out to be a more complex development, consisting of multiple paths, which proceed in different contexts of use and, what is particularly important here, are considerably influenced by the paradigmatic links to other items and constructions. A more general conclusion is that this view of change may be closer to reality than linear models in form of directed clines and paths.

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The evolution of italo-romance spatio-personal deictic adverbs: subjectification and refunctionalization

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In this paper, I discuss changes which have taken place in the history of the Italo-Romance system of spatio-personal deictic adverbs. I argue that these changes are examples of both subjectification and refunctionalization, and that they provide support for the view that the latter process takes place according to a principle of 'core-to-core' mapping, in which some element of the old opposition is retained in the new one.

Latin had a system of spatio-personal deictic adverbs based on three stems (also found in demonstratives): H- (speaker), IST- (addressee), and ILL- (non-discourse-participant), and four endings: -IC (static point), -AC (movement towards, atelic), -UC (movement towards, telic), and -INC (movement away from) — thus, for instance, HIC 'here', HAC 'this way', HUC 'hither', HINC 'hence'. Reflexes of the last two endings do not survive in any systematic way in Italo-Romance; however, both the -IC and -AC forms survive in many Italo-Romance varieties, yielding pairs of adverbs which are sometimes regarded as synonyms or stylistic variants — thus, in Tuscan, which has retained a three-stem system, *qui*/*qua* (speaker orientation), *costì*/*costà* (addressee orientation), *lì*/*là* (non-discourse-participant orientation). (The *qu-* and *cost-* stems arise from reinforcement of Latin H- and IST-, respectively, by a preceding presentative *ECCU.)

In fact, the *-i* and *-a* forms are not synonymous. I shall concentrate on northern varieties of Italo-Romance (including standard Italian spoken in northern Italy), in which the three-term system has been replaced by a two-term opposition between proximity and remoteness — this *qui*/*qua* 'here' vs. *lì*/*là* 'there'. In each case, the *-i* form is more precise or 'punctual' than the *-a* form (a similar distribution can be found, *mutatis mutandis*, in Spanish). In many varieties, additional changes have affected *lì* and *là* (but not *qui* and *qua*). In some varieties, *lì* comes to encode spatial reference intermediate between *qui*/*qua* and *là* — thus *qui*/*qua* 'here' (proximate), *lì* 'there' (middle distance), *là* 'there' (remote). In a further development, a subset of these varieties have reinterpreted this system as a discourse-based system, similar to the one which existed in Latin — thus *qui*/*qua* (speaker orientation), *lì* (addressee orientation), *là* (non-

discourse-participant orientation). There is also evidence that, in some circumstances, *lì* conveys greater involvement (commitment or enthusiasm) than *là*. For relevant data, see Rossini (1979), Vanelli (1992), Vanelli & Renzi (1995), Irsara (2009), and Sauva (2009).

Four developments are involved here. First, the Latin forms which encoded the opposition between static location at a point and atelic movement towards that point lose the stasis/motion distinction and come to encode an opposition between a precise area and a diffuse area, whether location or 'movement towards' is involved. Subsequently, the exponence of the distinction between precise and diffuse remoteness may come to encode a distinction between middle distance and greater distance. Next, the same morphology may come to encode a distinction between addressee-orientated deixis and deixis orientated outside the discourse. Finally, this distinction may be co-opted to encode a greater or lesser degree of speaker involvement. The pathway followed is therefore: 'punctual/atelic > precise/diffuse > near(er)/far(ther) > addressee/non-discourse-participant > greater involvement/lesser involvement'. These developments instantiate subjectification, the 'semanticization over time of subjectivity, understood as relationship to the speaker and the speaker's beliefs and attitudes' (Traugott 2010), and conform to the account of refunctionalization proposed by Smith (2011), in that they involve a process of 'core-to-core' mapping, in which some element, however abstract or vestigial, of the old opposition is carried forward into the new one.

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Syntactic behavior of *Spray-load* verbs in Old English

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In this presentation, I will analyze argument realization patterns of triadic *Spray-load* verbs in Old English (OE), in the Lexicalist framework (Levin 1993, 2006). In Present-day English (PDE), *Spray-load* verbs classify as verbs licensing a well-known locative alternation, between the syntactic variants [V-NP_1-*on*NP_2] or [V-NP_2-*with*NP_1]. The aim of this analysis is to demonstrate the stages of the development of locative alternation in the early English language. To that end, the range of OE syntactic constructions will be reviewed, in which triadic *Spray-load* verbs realized their arguments. The distinction will be made between the genuine locative variant, as in (1a), in which the preposition *on* assigned accusative case to its complement and the place variant, as in (1b), in which the complement of the preposition *on* is marked with dative case.

(1) a. & ecedes dræstan, smyre on a stowe ðær ðæt sar sy.
(colacnu,Med_3_[Grattan-Singer]:94.3.499)

b. and seow ða gedwyld on dyrstigum mannum.
(coaelive,+ALS_[Memory_of_Saints]:203.3443)

The main claim is that locative alternation was already licensed in OE. However, OE verbs imposed different conditions on their arguments in syntactic variants. The construction in (1a) is the predecessor of the PDE [V-NP_1-*on*NP_2] variant, whereas in the OE variant [V-NP_2-*with*NP_1] the head of PP was the preposition *mid*, the see (2) below.

(2) …ðæt man mid deorwyrðum smeringum godra manna lichaman smyreð
(cogregdC,GDPref_and_4_[C]:37.318.1.4761)

Given that in PDE, the alternating variants are claimed to be near-semantic paraphrases, in order to verify this requirement for the alternation in OE, the relevant diagnostics from adverbials will presented. The semantic test will show that Locatum argument in (2), i.e., *godra manna lichaman* is completely affected, in contrast to the Locatum argument in (1). More generally, this analysis contributes to a better understanding of the development of diathesis alternations in English.

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On the Position of Adverbial Clauses in Early New High German: A Multifactorial Analysis

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In the last decades many researchers have analysed the ordering distributions of subordinate clauses (Axel 2002; Lötscher 2005; Demske 2009). This talk investigates the position of adverbial clauses with regard to the matrix clause in a multifactorial way, which apparently has never been systematically studied from this perspective for the period of Early New High German.

Like Wasow (2002), Diessel (2005) has already combined the two general factors that explain constituent structure: processing (Hawkins 1990, 1994, 1998) and information structure (Firbas 1966; Prince 1980). What Diessel has shown for causal clauses in cross-linguistic data (et al. 2011) and also for adverbial clauses in Modern English (2005) is illustrated for a historical period of German.

The aim of this talk is (i) to ask if those results are also true for a historical state of a Germanic language and (ii) if so, to connect these findings with concepts from the field of communication psychology, which are relevant for historical linguistics and syntax as well.

Using corpus data from prose of this period (1350-1650), it is shown that the position of adverbial clauses with respect to the matrix clause varies with their meaning or function. The corpus includes the texts *Wilhalm von Österreich* (1481), *Tristrant und Isalde* (1484) and *Annus Christi* (1597), from which I have extracted about 1200 adverbial clauses that further are subdivided into the semantic types conditional, causal, purpose, consecutive and concessive.

It turns out that conditional clauses (1) are common in initial position whereas causal (2), purpose (3), and consecutive clauses (4) follow the matrix clause. Concessive clauses tend to appear in both positions.

(1) *So man auff silber vergulden wil*, so laßt man das gold under das quecksilber.
'If one wants to gild on silver, then one has to mix the gold in the quicksilver.'

(2) Lieber vater, helffent mir umb ein soelich weib, der angesicht mir heinnachte erschinen ist, *dann ich nicht ein jar leben mag an sy*.

'Dear father, help me for such a woman, whose face appeared to me this night, because I don't want to live a single year without her.'

(3) Komment mir zehilff, *das ich nicht so ellendigklich hie verderben muoß!*
'Come to help me, so that I don't have to pass away so miserably here.'

(4) Doch so was der knab schneller zuo soelicher anfechtung, die so groß was, *das er die nicht verhellen kund.*
'But so the boy faster arose to such a challenge, which was so big, that he couldn't destroy it.'
(Examples (1)-(4) *Wilhalm von Österreich*, 1481)

Specifically, it is shown that the occurrence of final adverbial clauses in Early New High German is not only motivated by processing but also by the recency-effect, which is part of a communication psychological concept known as serial position effect (Murdock 1962). Initial position, on the other hand, results from semantic and discourse pragmatic forces that may override the processing motivation.

The talk demonstrates that the positional patterns of adverbial clauses are already motivated by cognitive and functional factors that are in conflict with each other. Furthermore, it is drawn out that there is a relation between the position of adverbial clauses and the concept of the serial position effect.

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Location, Goal and Path: the «Locative» case in Nanai and beyond

Natalia Stoynova (V.V. Vinogradov Russian Language Institute, Russian Academy of Sciences)

There are more or less comparable inventories of spatial cases in Tungusic languages, and their functions are quite clear and stable across the cognate markers: Directive, Elative (or two Elatives), Essive (usually also with the dative function), Prolative (in the majority of the languages).

However together with these cases Tungusic languages have also so called "locative case" *-la*. It is usually polysemous; the set of its spatial meanings is quite intriguing and varies across the languages; it also tends to have no specialized function: in all its uses it competes to a greater or lesser extent with one of the main spatial cases. *La*-case can mark a) LOCATION (essive), b) GOAL (directive), c) PATH (prolative). The paper deals with the puzzle of the meanings of the *la*-case and proposes the possible scenario of their diachronic development. The prolative function of *-la* seems to be the most interesting in this respect, because PATH remains underinvestigated in a crosslinguistic perspective in comparison to other spatial roles.

The data of Nanai (including the elicited and text field data) is considered more in detail, because the central function of *-la* in Nanai is exactly to mark PATH (prolative). Other data is considered more briefly and taken from grammar descriptions: the pilot data on Even, Evenki, Neghidal, Orok, Udihe is involved by the moment.

All combinations of the main meanings of *-la* are attested crosslinguistically: LOCATION+GOAL (cf. e.g. Cresseils 2006), LOCATION+PATH, GOAL+PATH (cf. Ganenkov 2002). So the evidence from typology does not give us clear predictions on the diachronic shifts within this cluster.

By comparing the meaning combinations attested in different Tungusic languages to the genetic classification, one can postulate the following scenario as the most probable:

Northern:

Evenki, Neghidal: > GOAL **(⊗LOCATION)**
Even: = LOCATION+GOAL

Southern:

Udihe: = LOCATION+GOAL
Orok+Nanai: LOCATION+GOAL+**PATH**
Orok: > LOCATION+GOAL+**PATH**
Nanai: > (**(LOCATION))**+(GOAL)+PATH

The classification of Tungusic languages is problematic itself (cf. discussion in Cincius 1949; Vasilevič 1960; Doerfer 1978; Vovin 1993; Whaley et al. 1999; Georg 2004 et al.). However the general division into two (or three) subgroups and closer relations between Nanai and Orok and between Evenki and Neghidal which are relevant for this scenario are adopted in majority of papers.

This scenario supposes LOCATION+GOAL as an initial cluster of meanings and PATH as the last stage of the semantic development of *-la*. This stage one can observe in Nanai.

In Nanai the essive function of *-la* is rudimentary: it is attested only across postpositions (cf. *oja-la-ni* on-LOC-3SG '(to be) on' vs. *oja-če-a-ni* on-DIR-OBL-3SG 'onto') and a narrow

class of locative nouns (*boa-la* ‘outdoors’, *wajaa-la* ‘at the river bank’), but not across standard nouns (in Avrorin 1959 the locative *-la* is described as a separate marker). The directive use of *-la* is very restricted (e.g. it is possible for the argument of the verb *ese-* ‘to reach’, but not for the argument of the verb *ǯi-* ‘to come’) and in this function the marker *-la* competes with the directive marker *-či* (sometimes also with the accusative *-wa*).

In its prolative use *-la* has no equivalents in Nanai case system: in Nanai there are no cognates of prolative markers *-ki* and *-li*, attested in other Tungusic languages. The Nanai *-la* codes not all meanings of the PATH-domain: the meanings ‘through the hole’ (1), ‘through the surface / substance’ (2), ‘on the trajectory’ (3), but e.g. not the meanings ‘along the edge’, ‘through the intermediate point’, ‘over the barrier’.

(1) kolan-dola-ni niə-gu-xə-ni
chimney-**LOC**-3SG go.out-REP-PST-3SG
‘...And (the fox) climbed out through the chimney’. (nchb_120809_ns_SkazkaDvaStarika.070)

(2) nəmdə-ku-kən boso-**la** opo xəjə-i-ni
thin-DIM-DIM textile-**LOC** flour pour-PRS-3SG
‘Flour pours out through the thin textile’. (elicit.)

(3) mənə pokto-**la**-i=tu ənə-ǯəm-bi
oneself road-**LOC**-REFL.SG=LIMIT go-FUT-1SG
‘I will keep going my own way!’ (npo_120809_ns_SkazkaLisa.021)

The range of these meanings and their semantic relations to the other meanings of *-la* will be discussed in detail.

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Abbreviations

SG — singular; REP — repetitive; REFL — reflexive; PST — past; PRS — present; OBL — oblique; M — masculine; LOC — locative; LIMIT — limitative; FUT — future; DIR — directional; DIM — diminutive.

Diachrony and typology of converbs in Indo-Aryan

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In Indo-Aryan (IA) scholarship the notion of converb occupies a special place since it is one of the elements defining a so called 'linguistic area' (cf. Masica 1976, Subbarao 2012). The form itself has been analysed at various stages of IA and in a number of dialects (e.g. Dwarikesh 1971; Schumacher 1977; Tikkanen 1987; Peterson 2002; Yadav 2004; Lohar 2012). This study will outline the basic trends in morphosyntactic and semantic behaviour of converbs, from diachronic and typological perspectives, based on empirical evidence from a number of selected IA vernaculars.

Firstly, we will focus on the motivations for the development of the converbal forms and the evolution of the way they mark their main arguments. What we already know from New Indo-Aryan (NIA), is that there is a certain variation in the nominal and pronominal systems with respect to the main arguments marked as A and O. Basically it is not the transitivity of the converb but the transitivity of the main verb which triggers A marking in the perfective domain[30]. It also appears that pronominal A marking is more conservative than nominal marking, i.e. pronouns preserve A marking (here the hierarchy follows the one as described in Silverstein (1978) - pronouns lying to the right of the hierarchy 1st pers. > 2nd pers. > 3rd pers. are more prone to ergative marking).

In Silverstein's view, one would expect pronominal O marking in the perfective domain more often than nominal marking. This is however not necessarily the case. Early NIA rarely shows O marking in contexts where contemporary languages favour it (animate, definite objects). The main assumption is thus that such tendencies should be confirmed in our database

[30] Nepali forms the exception to this rule.

which includes a number of IA dialectal groups. Also, it will be interesting to see under what circumstances the first O-marking of animate/definite objects appears.

Preliminary research has already demonstrated that historically, O marking has been first introduced in the imperfective domain and then in the perfective domain. This diachronic evolution has already been explored for the ergative construction (cf. Khokhlova 2001; Stroński 2011) but it seems that this rule is also operational in converbal chains. For example, early Rajasthani texts predominantly show an unmarked O (both animate and inanimate) in the converbal chain construction.

Converbs are generally said to be controlled by the subject of the main clause. Hock (1986) tried to prove that OIA evolved from language in which converbs were controlled by subjects to language in which converbs were controlled by agents. We would like to show that for early NIA the same subject constraint does not necessarily hold and converbs can, but do not have to be controlled by agents (in other words, they need not be A-oriented). Contemporary NIA shows a certain degree of variation in this respect – Hindi with a few exceptions obeys the same subject rule (cf. Kachru 1981; but an entirely different view was expressed by Bickel & Yadava 2000). In the data thus far available, there are many examples of converbs which have passive-like or impersonal value.

The text corpus inspected by us consists of early Rajasthani prose texts from the 15th to 17th centuries (Bhānāvat and Kamal 1997-1998). The early Rajasthani data will be compared with other early NIA dialects such as Braj (Vājpeyī 2009) and Awadhi (Gautam 1954). The corpora have been tagged by means of the 'IA tagger' (Jaworski 2014) – a programme designed for tagging early NIA texts at 5 different levels, namely – morphological, parts of speech, syntactic, semantic, pragmatic (IA Tagger 2014). Optical recognition of Rajasthani texts was supported by a Hindi OCR programme (Hellwig 2014).

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The penetration of French into four occupational domains in medieval England

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This paper presents interim findings of the Leverhulme-funded Bilingual Thesaurus of Medieval England project, in which the extent of language contact influence in non-elite occupational domains in medieval England is identified. We investigate how far they were subject to contact-induced linguistic change, and whether acceptance of or resistance to French lexical influence varied significantly by occupational domain. Conclusions can be drawn as to the extent to which items were borrowed from French to fill pre-existing lexical gaps in English, or English words existed but were displaced by French terms.

Methodological questions are raised, including the identification of the lexis for the semantic domains in both languages, and the use of a conceptual categorization devised for a diachronic view of English - the Historical Thesaurus of the OED - that requires slight modification to encompass the practices of the medieval period.

Lexis is analysed along the following dimensions: single-word lexemes versus compound words, so as to control for the proliferation of lexical items formed by compounding; single language versus multiple language origin, to control for the difficulty in many cases of isolating a single language of origin for medieval English borrowings. Results are presented separately to allow the penetration of French to be assessed accordingly.

The semantic domains so far investigated are building, manufacture, shipping, and farming, where we report on and discuss results obtained at this stage. Preliminary results suggest that the levels of French lexis in the first three of these are similar, at around 25%. Farming offers a nuanced picture of the interaction between the two languages: terms for agricultural processes show a level of French origin lexis comparable to other occupational domains, whereas under 10% of those for agricultural instruments are of French origin.

Elite occupations (military, ecclesiastical, governmental etc.) were clearly not the only ones to experience intense contact influence from mediaeval French (Kastovsky 2006). Findings are compared with those of earlier lexical contact influence studies (Dekeyser 1986, Rothwell 1998, 2010); the social and acquisitional frameworks (Trotter 2003, Ingham 2012) within which such developments took place is further discussed.

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Head last to head first and left peripheries: evidence from Khanty and Udmurt relatives

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Aims and claims: This talk examines the effect of the head last to head first parametric change on the relative clauses of Khanty and Udmurt, two Finno-Ugric languages of the Russian Federation. We claim that once the relatives of these languages undergo a prenominal to postnominal change, they develop a left periphery, and relative operators grammaticalize from *wh*-elementsand demonstratives. The relative cycle (Van Gelderen 2009), however, has not begun.

Background to Khanty and Udmurt: Based on the 2010 census, Ethonogue estimates that Udmurt has 339,800 speakers, while Khanty has 9,580. These languages have a native SOV word order. Originally they allow one finite verb per clause; subordinate clauses, including relatives, are nonfinite. As characteristic of SOV languages, relatives clauses in Khanty and Udmurt are prenominal and employ the gap strategy.

(1) *[katül-m-am]* *kuл* *put-nü kiť*
catch-PTC.PST-1SG fish pot-LOC stay-[PST.3SG]
'The fish that I have caught stayed in the pot.' (Csepregi 2012, ex. 9b)
Khanty

(2) *[Kük* nunal *zorüš']* *zor* *gült-i-z* *š'erüs'-ez*
two day fall-ing rain.NOM destroy-PST road-ACC
'The rain that has been falling for two days destroyed the road.'
Udmurt

Khanty and Udmurt, however, are currently under heavy influence by the areally dominant SVO Russian (most speakers are bilingual). In the last few decades the VO word order started to appear in both main clauses and subordinate clauses. The change from head-final to headfirst order also affects relative clauses, and it proceeds in three steps.

Step 1; positional change: The head-final to head-first shift in noun phrases first affects the position of relative clauses: while originally they were prenominal, now they can appear postnominally as well. This step affects only the position but not the relativizing strategy (gap vs.relativizer) or the finiteness of the clause.

(3) *kuл, [ma-nü* *katл-üm]* *put-nü kiˇť*
fish 1SG-LOC, catch-PTC.PST pot-LOC stay-[PST.3SG]

‘The fish that I have caught stayed in the pot.’ (Csepregi 2012, ex. 9c)
Khanty

Step 2; development of a left periphery: In the next step, the postnominal non-finite relative switches from the gap-strategy to the relativizer strategy. Russian, whose influence set the change to VO in motion, employs relativizers whose surface form is identical to *wh*-elements. Khanty and Udmurt also use *wh*-based as relativizers.

(4) *ju* *wül-wül* *qa-nü* *[**qo** mä wül-m-äm]*
3SG live-PRES.3SG house-LOC where 1SG live-PST.PRT-1SG
‘He lives in the house where I lived.’ (Potanina 2013, 79)
Khanty

(5) *So* *korkan* *ik* *ul-i,* *[**kytyn** lu-ono* *mynym]*
3SG house.INESS same live-PST.3SG where be-PRT 1SG.DAT
‘He lived in the same house, where I have to live.’
Udmurt

As an alternative to (4) Khanty also employs a demonstrative-based relativizer (*t’u* means ‘that’). Russian only has interrogative based relativizers, but not demonstrative based ones. (6) therefore shows that Khanty (and Udmurt) do not just substitute Russian words with native words but have a structural requirement to mark clause typing. The relative operator is an overt marker of the clause type (which is defined by the complementiser).

(6) *piˇrüš iki,* *[**t’u** лˇ˙uw ˇ˙awi-л-at* *ma* *nˇamлat-üüл-t-am]*
old man that 3SG daughter-3SG-INS 1SG think-FREQ-PTC.PRS-1SG
‘the old man whose daughter I am thinking about’ (Csepregi 2012, ex. 28c)
Khanty

Relative operators (whether interrogative or demonstrative based) or relative complementizers cannot appear in prenominal nonfinite relative clauses in either Khanty or Udmurt. We suggest that this is because prenominal relatives are truncated clauses: they do not have a left periphery and so they do not provide the positions that could host overt markers of clause typing (i.e. C or spec CP operators). We propose that postnominal nonfinite relatives, on the other hand, may or may not be truncated. Truncated ones have no left periphery and so no positions to host overt markers of clause typing. This is the analysis of postnominal relatives without a relativizer (see (3)). Non-truncated non-finite postnominal relatives are full clauses with a left periphery. As these clauses have the positions that can host relative operators and complementizers, marking the clause type (as defined by C) is possible in them, and they feature a relativizer ((4)–(6).)

With a left periphery in place in postnominal relatives, Khanty and Udmurt have started to grammaticalize interrogatives (and demonstratives) into relative operators, and prepose these operators into the left periphery. Roberts and Roussou (2003) and Van Gelderen (2002, 2009) argue that the diachronic life of relative clauses follows the relative cycle. First the operator in spec, CP is reanalyzed as the C head of the same projection. At this point a new, reinforcing

operator may be introduced in spec, CP. Then the originally phrasal element, now a C head, may undergo head movement to a higher C head and is reanalyzed as being inserted in that higher position. We argue that Khanty and Udmurt have not yet started the relative cycle: the wh- and demonstrative based elements that introduce the relative clause are still operators in spec, CP and have not yet grammaticalized into relative complementizers. Firstly, the employment of relative operators is a new phenomenon in these languages, and the elements under consideration have not had time to grammaticalize into a head. Secondly, no new reinforcing operator can appear next to the interrogative and demonstrative based relative elements; this is best explained if these elements are still in spec, CP. Thirdly, these relative elements can be modified by postpositions (7); this shows that they are phrases rather than heads.

(7) *So korkan ul-i, **[mar šöryn** kvala pukt-ono tynyd]*
3SG house.INESS live-PST.3SG what behind holy.house build-PRT you.DAT
'He lived in the house behind which you have to build the holy house'
Udmurt

Step 3; change in finiteness: In the final step the nonfinite verb form is replaced by a finite verb. The operator in finite relatives is obligatory. We propose that this is because finite relatives in Khanty and Udmurt are always full clauses with a left periphery included. As such they have the position that can host relative operators, and the structural requirement to mark clause typing overtly makes using that position obligatory.

(8) *merüm **[muɣuj** jateswe-**wül** aNk-im]*
tale which tell-PRES.3SG mother-POSS.1SG
'I listen to the tale that is told by my mother.' (Filchenko 2007, 302)
Khanty

(9) *veras'ki todmo-nenym **[kudiz** jarat-**e** kochysh-jos-ty]*
talk-PST.1SG friend-POSS.1SG.INS REL.NOM like-3SG.PRS cat-PL-ACC
'I talked with my friend who likes cats.'
Udmurt

R**eferences**

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The "Penutian phylum" which includes a number of native language families of of Western North America has been controversial since it was first proposed by Edward Sapir (1921) as an extension northward of an existing California "Penutian" grouping, and recent major reference works (e.g. Campbell 1997, Goddard1997, Mithun 1999) no longer include it except in a historical context. Instead, it has been broken up into a number of smaller groupings as well as isolates. Among the smaller groupings, the "Takelman family" was not set up by Sapir but later by Swadesh (1965), starting from an observation by Frachtenberg (1918) of lexical resemblances between the isolate Takelma and the Kalapuyan family, both located in Oregon but not in adjacent territories. Swadesh's new grouping was readily accepted and his lexical data, together with a couple of pronouns, were used as the basis for Shipley's reconstructions of "Proto-Kalapuyan" and "Proto-Takelman" (1969, 1970).

Unfortunately, while Takelma's complex grammatical structure had been exhaustively described by Sapir (1922), available Kalapuyan data consisted mostly of field notes and of copious but unanalyzed texts (especially Jacobs 1945), which Shipley and some others found daunting. Those linguists who did attempt grammatical analyses (Takeuchi, Berman) left them unpublished. As a result, very few linguists had firsthand acquaintance with the structure of Kalapuyan languages, which is extremely different from that of Takelma, and the "Takelman family" remained the "mainstream" consensus, with Takelma and Kalapuyan considered each other's closest relatives. Indeed Shipley's data for "Proto-Takelman" were so closely similar that readers who relied on them alone could hardly come to a different conclusion.

In 1998 Tarpent, who had been investigating the morphologies of languages of Sapir's grouping in order to determine the place (if any) of Tsimshianic (Sapir's northernmost family) within the group (e.g. Tarpent 1997), teamed up with Kendall (author of a 1977 work on Takelma syntax) to challenge the consensus by pointing out the major morphological differences between Takelma and the Kalapuyan languages, especially their extremely different verbal structures (inflectional vs. agglutinative), concluding that the lexical resemblances must be due to borrowing at a time when the two groups were adjacent to each other (Tarpent & Kendall 1998 [T&K]). Their joint presentation convinced Mithun, who included their results in her 1999 encyclopedic work. A few other linguists (e.g. Grant 2002) preferred to consider the resemblances (including a few pronouns) as indicating an ancient genetic relationship and to attribute the morphological differences to a very long separation, even though the territories were in the same general area. But the considerable typological and morphological differences do not seem to include even vestigial morphological elements which might point to shared ancestry. A few shared pronouns (not in all Kalapuyan) could also be borrowings.

Although T&K's main results are still valid in general, two lines of research need to be pursued in order to determine the relationship between the two linguistic groups and with others

in the Penutian context: a) internally, Kalapuyan morphology must be established on a firm basis, taking into account all three languages of the family; earlier studies by Takeuchi (1969) and Berman have now been supplemented by Banks (2007), but their various analyses and morpheme glosses do not always agree or cover the less well-known members of the family; b) externally, resemblances with other languages, especially of the area, must also be investigated. Sapir himself (1922) had noticed morphological resemblances between Takelma and Yokuts (South Central California), and ongoing research has revealed a number of such resemblances between the Kalapuyan languages and Molalla, their immediate neighbour to the East, as well as with the Chinookan languages North of them.

While these findings are important for the description and classification of Penutian languages, they also highlight and confirm the importance of morphological vs lexical elements in the determination of linguistic relationships, genealogical or not. Methodologically, they argue against using premature "reconstruction" of lexical items with the goal of classification in ignorance of morphological structure; and the resemblances of some pronominal elements in Takelma and Kalapuyan can also contribute to studies of contact and borrowing.

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The origins of the *of*-apposition and related *of*-binominal constructions

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Synchronically the *of*-appositional constructions (*the city of San Francisco)* are syntactically and semantically linked with head-qualifier binominals (*a house of straw*) and the evaluative binominal noun phrases (EBNP; *that idiot of a doctor)*. Keizer (2007) specifies the distinction between these categories in that EBNPs involve predication (*the doctor is an idiot*), head-qualifier constructions involve specification (N2 specifies a kind of N1, *a straw house*), and appositions involve both (unique) specification and predication (*the city is San Francisco*). However, evidence that the boarders between these categories are fuzzy can be seen in other accounts where these distinctions are amalgamated (cf. Austin 1980; Taylor 1996: 338). This paper examines these three categories from a diachronic perspective, focusing on the exact relationship between the two nouns in these three different constructions and the historical relations between these categories. In particular, as part of a larger project tracing the grammaticalization of these constructions, the study aims to shed some light on these categorization issues by examining the origins and historical relations between these constructions.

Apart from studies of the usages of the preposition *of* in Old and Middle English (e.g. Mitchell 1985: 506 - 510; Mustanoja 1960: 395 - 399), the diachronic development of the *of*-binominal has predominately been approached from a Construction Grammar perspective, and most studies have focused on *of*-binominal quantifiers denoting size, e.g. a lot/ a bit/ loads of, sort/kind/type-of (e.g. Brems 2011; Traugott 2008). Based on this research, which indicates that constructionalization of the *of*-binominal began in the Middle English period (cf. Denison 2002), the present study qualitatively assesses data from the *Penn-Helsinki Parsed Corpus of Middle English* (PPCME2) to trace origin of the *of*-appositional network. In contrast to previous studies, however, this analysis employs Functional Discourse Grammar (FDG). FDG is a more formalized functional theory and a top-down language model that breaks the Grammatical Component of an utterance into four levels of the grammar: pragmatics (Interpersonal Level), semantics (Representational Level), syntax (Morphosyntactic Level), and phonology (Phonological Levels) in order to map how these modules interact to form an appropriate linguistic utterance (c.f. Hengeveld & Mackenzie 2008; Keizer *forthcoming*).

The study should find that head qualifiers and *of*-apposition do have different origins in Middle English, and that the EBNP is a later, possibly unrelated, development.

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Analytic drift revisited: the fate of derivational affixes in English

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Historical accounts of English word formation tend to present neat unidirectional paths of development of derivational affixation in the language. Thus Old English is presented as the period where native prefixation thrives and the subsequent periods are said to be characterised by a dramatic decrease in native word formation, both with regard to the inventory of native affixes and with regard to their role in forming new words. By the Middle English period the fate of the native prefixes is commonly presented as sealed (Kastovsky 1992, Sauer 2010). For the loss of these prefixes in Middle English different phonetic, prosodic and semantic explanations have been put forward (Lutz 1997, Dietz 2004, Molineaux 2012) but there is general agreement that many of the prefixes are considerably weakened already towards the end of the Old English period. And although most of the borrowed Romance prefixes can clearly be shown to belong to different functional domains (Adamson 1999) the subsequent ‘depletion’ of the language of

native prefixes is traditionally seen as connected to the influx of borrowed prefixes from French and Latin (Burnley 1992, Sauer 2013), whilst more recently it has been discussed as an instance of analytic drift in the domain of the lexicon (Haselow 2011).

This paper will show that such accounts are by no means satisfactory. Although it is well known that the Old English verbal prefixes ultimately derive from free spatial particles (Los et al. 2012, Thim 2012) it has been widely ignored that the Middle English period also witnesses the rise of a number of new native verbal prefixes, in particular *down-*, *out-*, *up-*. In Marchand (1969) and later accounts these are treated as verbal compounds, but their phonological, morphological and semantic properties clearly show that at least some of them become prefixes in post-Conquest English. Using data from OED3, the MED, the Penn-Helsinki Parsed Corpus of Middle English and additional evidence from Middle English poetry the paper will show the development to be the result of the interaction of various linguistic subsystems (Noel Aziz Hanna 2013) and discuss implications for the typological and long-term diachronic perception of English word formation.

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Waves in computer-assisted simulations of linguistic diffusion

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Since the work of Schmidt (1872), the wave has been a key concept in describing the diffusion of linguistic innovations in a speaker community. Recently, the study of language change in speaker communities through modeling and computer-assisted simulations has become more widespread (e.g. Baxter et al. 2006, 2009, Blythe/Croft 2012, Pierrehumbert et al. 2014). The aim of this talk is to investigate whether computer simulations show wave phenomena like the ones described by Schmidt and later linguists, and what we can learn om this about the mechanism of speaker interactions that lead to the propagation of linguistic innovations. For this purpose, a number of earlier models described in the literature will be looked at and discussed (e.g. Nettle 1999, Livingstone/Fye 1999, besides the aforementioned). This will be supplemented and contrasted with results of own simulations.

The concept of the wave is predominantly used in dialectology, where the focus is on the areal spread of linguistic innovations (cf. e.g. Wolfram/Schilling-Estes 2003). Dialect maps provide rich data on the diffusion of certain features within a speaker community. The talk will discuss the possibilities of comparing data from dialect maps to the behaviour observed in simulations of speaker communities. The comparison with empirical data, e.g. from the Swiss German Dialect Atlas (SDS), is expected to help improve the models used in the simulations, as well as to help uncover weaknesses in current modeling approaches.

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The acquisition and loss of subject inversion in the history of English

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This paper models the development and loss of V2 in English from the perspective Yang's Tolerance principle (Yang 2005, 2010), a formal model for how the learner detects productive processes (or lack thereof) under inconsistent input.

It is well-known that V2 was lost in English in the 15th-17th centuries. Van Kemenade and Westergaard (2012) and van Kemenade (2012) discuss the nature of the variation in Middle English, and the loss of V2 in various contexts across the Middle English and early Modern periods. They analyse this variation in terms of interplay between syntactic and information structural factors. Of the two types of V2 environment in Old and Middle English, type 1 involves V to C movement (following an initial XP that is *wh-*, *ne*, or an adverb of what we call the THEN-group (comprising then, thus, now, cf. Warner 2007). Type 2 involves movement to a functional head below C, which we call then non-THEN (~THEN) group. Van Kemenade and Westergaard show that that V2 variation in Middle English is keyed to three factors: 1) type of first constituent, 2) type of finite verb (auxiliary, unaccusative, transitive/unergative intransitive), and type of subject (pronominal vs nominal, or more precisely, discourse-given vs. discourse-new, generic or focused).

We investigate how language acquisition of the variable data in the early period of ME may account for the observed changes. We focus on a specific subset of the data, involving V2 variation in contexts with initial adverbs, in which we distinguish between adverbs of the THEN-group (the first type of V2 involving V to C), and the ~THEN group (the second type of V2). We distinguish, within these contexts, two types of lexical finite verb: unaccusative (unacc*)* and transitive/unergative intransitive (unerg), and analyse the development of inversion from the perspective of Yang's Tolerance Principle (Yang 2005, 2010).

The Tolerance Principle guides the learner to learn productive processes which may have exceptions, and places an upper bound on the amount of exceptions that a productive process can

tolerate. Suppose a generalization in principle applies to *N* lexical items, out of which some exceptional members do not follow the generalization. The Tolerance Principle holds that the generalization is productive if the number of exceptions does not exceed *N/ln N*. The model has been widely applied to the study of phonological, morphological and syntactic acquisition.

We examine the Middle English and early Modern English data in the Penn parsed corpora for Middle English (Kroch and Taylor 2000). For each of the seven periods, we extracted patterns of inversion and non-inversion following specific types of adverb, categorized for three finite verb types and according to lexical item (verb lemma). Our goal is to show that the trajectories of change are broadly predictable on the basis of the data from the first stage of Middle English (1150-1250), which we assume may be viewed as an approximation of the data for the learners at the time.

To apply the Tolerance Principle, we examine the properties of verbs—whether it participates in subject inversion or noninversion—the nature of the subject (pronominal or nominal NP), initial topic (THEN or ~THEN) as well as verb class: unaccusative (unacc) and transitive/unergative intransitive (unerg). We counted the verb type frequencies for all such cases, excluding items that show variation, i.e. verbs used in both inversion and non-inversion were excluded, as they provide conflicting information. The excluded items constitute less than 10% of the verb types. We illustrate with a concrete example. When the initial adverb is THEN, and the subject is a lexical NP, the data contain 16 unacc verbs (14 inversion, 2 non-inversion) and 37 unerg verbs (31 inversion and 6 non-inversion). The tolerated thresholds for the verb classes are 16/ln16=6 and 37/ln37=10. We use the notation such as (16, (4, 2), 10) to combine these quantities. For both verb classes, then, the model predicts inversion to be the productive process. (A productive process exists if either of the numbers in the inner brackets is smaller or equal to the last number, the threshold value.) The results of our quantitative analysis are given below, where the productive generalizations are given in boldface:

(1) (THEN, pro): (a) **unacc (19, (17, 2), 6)**, (b) unerg (64, (46, 18), 15)
(2) (THEN, NP): (a) **unacc (16, (14, 2), 6)**, (b) **unerg (37, (31, 6), 10)**
(3) (~THEN, pro): (a) **unacc (28, (1, 27), 8)**, (b) **unerg (167, (16, 151), 33)**
(4) (~THEN, NP): (a) unacc (17, (8, 9), 6), (b) unerg (31, (15, 16), 9)

Thus, the model predicts in type 1 V2 (following THEN), NP subjects are productively inverting (2) whereas the noninversion pattern for pronominal subjects in type 2 V2 following (~THEN)—the modern English form—was already firmly established. The latter point is notable, because at this early stage of ME, the statistical frequencies of inverted subjects in all contexts are very high, yet the productivity model predicts its ultimate demise. The result also suggests that word order variation is sensitive to the type of adverb as a function of information structure (Kemenade & Westergaard 2012).

A final piece of the puzzle is: Why did the non-inversion eventually eliminate the inversion option, especially for (1) and (2), where the inversion pattern was productive in early ME? We provide a tentative solution, again based on the productivity model. If we pool lexical and pronominal subjects together (1 and 2), the inversion pattern ceases to be productive for both verb classes: unacc (27, (17, 10), 8); unerg (58, (37, 21), 14). By contrast, if we pool lexical and pronominal subjects together for the ~THEN case, the noninversion patterns remains productive: **unacc(41, (6, 35), 11), unerg(186, (24, 162), 36)**. Indeed, if we collapse the CP and non-CP

level adverbs together, we obtain: unacc (49, (15, 34), 13), unerg (208, (46, 162), 39). While non-inversion process does not reach the theoretically predicted threshold for productivity, the number of exceptions is only slightly higher (15 vs. 13 and 46 vs. 39). With the effect of sampling in linguistic input, this result amounts to a tentative argument that non-inversion was on the brink of productivity—a prediction we can make on purely quantitative basis from the earliest stage of ME.

In sum, we provide preliminary evidence that a formal model of productivity learning, with the use of parsed syntactic corpora, may offer insight on syntactic change from the perspective of language acquisition. Future studies will expand to the full range of first position constituents for a complete understanding of the inversion phenomenon in the history of English.

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A phylogenetic comparative investigation of source-goal asymmetries in Indo-European

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A well-known cross-linguistic similarity of motion event encoding systems is attention to goals rather than sources of motion. This was first described by Ikegami (1987) as a general, non-motion specific feature of case markers. Regier and Zheng (2007) show that speakers of Mandarin Chinese, Lebanese Arabic, and English describe motion event endpoints in finer semantic details compared to motion event beginnings. Kabata (2013) finds that ablative (source) case markers have undergone wider patterns of semantic extension compared to allative (goal) case markers in a comparison of 24 languages. The importance of goals over sources in spatial language has thus been established for different types of speakers, using both experimental methods (Lakusta and Landau 2005) as well as large corpora (Stefanowitch and Rohde 2004). Goals of motion are found to be expressed more frequently and with a more extensive range of

adpositions, adverbials, and cases. However, any potentially interesting diachronic patterns relating to the cross-linguistic attention to goals over sources have so far not been uncovered.

The main objective of this study is to report on an investigation of source-goal asymmetries in the Indo-European language family. The data have been collected from a parallel corpus of translations of *Harry Potter and the Philosopher's Stone* by J. K. Rowling into 25 Indo-European languages. The main question that is addressed in this paper is whether having a source-goal asymmetry is diachronically stable, i.e. whether languages consistently maintain this asymmetry over time or whether it was lost and gained several times along the branches of the Indo-European phylogenetic tree. This study was conducted by first collecting all clauses that express voluntary motion of humans to a different location in the original English book. These motion clauses where then coded for the presence of source and goal information. It was then calculated how often the expression of sources and goals was retained, lost or added in the translations. Phylogenetic comparative methods were subsequently used to asses the diachronic stability of the source-goal asymmetry in Indo-European. Specifically, ancestral state analyses were conducted to test whether the ancestors of the Indo-European languages display similar source-goal asymmetries as were found for the contemporary languages (see for an example of ancestral state reconstruction analysis Jordan et al. 2009).

The first results of this study suggest that the source-goal asymmetry in Indo-European is stable. Overall, the languages in the sample are more likely to retain goal information, and this behaviour can be reconstructed with confidence for the ancestral nodes of the Indo-European tree. This finding sheds further light on the cognitive underpinnings of source-goal asymmetries, giving further support for the saliency of endpoints in cognition and language (Regier and Zheng 2007). In addition, the paper addresses methodological questions regarding the usability and limitations of using a parallel corpus, as well as the use of phylogenetic comparative methods for the diachronic study of linguistic diversity.

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Step change in form and function: the history of WILL-verbs in Germanic

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Words are always changing with respect to both meaning and structural properties. But what causes some items to change and others not to, even in very similar environments?' The answer to this question has proven elusive; as McMahon (1994: 225) puts it: 'the actuation problem, sadly, will remain a mystery as ever' (cf Walkden, forthcoming). The follow-on questions are no easier: how big are the steps in the semantic development and how can they be identified? What changes take place in the syntactic structure when this happens? And are the changes in form and content always in step with each other?

Fertile ground on which to address these questions is to be found in what we call the WILL-verbs in Germanic (e.g. Swedish vilja, German wollen, Dutch willen, Danish ville, English will) (Hilpert 2008). The original root *wel- 'want, wish' is widely attested across the whole Indo-European family but in Germanic we find an interesting mix of cases where in some languages the reflex of that root shows little development from the original lexical meaning (German, Swedish, Dutch), in others it has lost the original meaning and has developed almost exclusively modal or temporal meanings (Present Day English (PDE)) and in others still it shows intermediate positions (Danish, Old English). In the present paper we restrict our attention to English on the one hand and Swedish and Danish as representatives of North Germanic on the other.

The change in question is one from a verb of volition to what is sometimes referred to as a future marker, but is more appropriately described as a 'confident prediction marker'. The contrast is illustrated by the examples in (1) from Old English and Present-Day English (PDE), where the volitional use in (1a) would be ungrammatical in PDE.

(1) a.Ne drinc nan man eald win, & wylle sona þæt niwe. (Ags Gosp OE)
NEG drink NEG man old wine WILL at once the new
'No man having drunk old wine straightway wants new wine.'

b. During the course of tonight's programme the people of Great Britain will drink 4 million and 516,2000 cups of tea. (BNC K4J 662)

The Scandinavian languages provide interesting comparison with each other and with English, where Danish has developed the 'prediction' meaning, but has also retained the 'desire' meaning as (2a) and (3a) illustrate. Swedish, on the other hand, has not undergone this change as seen in (2b).

(2) a. Bogen vil møde modstand. (Da)
b. #Boken vill möta motstånd. (Sw)

book.DEF WILL meet resistance
'The book will meet with resistance.'

(3) a. Jeg vil at du skal være her. (Da)
b. Jag vill att du skall vara här. (Sw)
I WILL that you shall be here
'I want you to be here.'

Bybee et al (1994: 256) posit the following stages to this cross-linguistically common semantic development:

(4) DESIRE > WILLINGNESS > INTENTION > PREDICTION

Changes such as that described in (4) have been referred to as 'clines' and have been assumed to exemplify gradual change. However, it is now generally recognized that 'most instances of change involve small micro-steps that are in fact discrete and therefore abrupt (in a tiny way)' (Traugott & Trousdale 2010: 20). Furthermore, these small steps happen separately in form and function, so that the development involves a complex interaction between small changes in the two dimensions.

In theoretical approaches to change, the distinction between form and function is either not sufficiently carefully made for this interaction to be modelled appropriately or there is an underlying and unjustified assumption that form and function develop in tandem. In addition such approaches often use simple labels for features/heads such as PRESENT and PAST. In this paper, we use a semantically based feature system inspired by Jaszczolt (2009) and Deo (2015) to capture the small changes to function that occur in the development of the WILL-verbs and an articulated phrase structure for the structural changes. We use this to attempt to establish the factors that put a halt to the process of change in some languages but not in others. On the basis of our general sketch of the development of these items, we consider how the changes identified can be modelled within three different frameworks Minimalism, Construction Grammar (CxG) and Lexical-Functional Grammar (LFG). These are chosen because each represents a different stance on the form-function relation. For Minimalism shifts of the kind exemplified by WILL-verbs necessarily involve a change within the syntactic configuration; for CxG the two dimensions are intrinsically linked through the central concepts of construct and construction; while LFG is a modular approach within which representations of form and function are free to vary independently.

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The development of complex demonstratives in Norwegian

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The Norwegian adverbs *her* 'here' and *der* 'there' typically function as locational adverbials: *boka ligger der* 'the book lies there'. However, they may also be used adnominally or pronominally together with a demonstrative (henceforth *complex demonstratives*):

1. **den** bok-a **der**
   that book-DEF **there**
2. **den** **der(re)** bok-a
   that **there** book-DEF

The development from locational adverb to demonstrative is an attested grammaticalization path from many languages (cf. Heine and Kuteva 2002: 172). If the intensifier (i.e. *her* or *der*) is used postnominally (1), the deictic function is exophoric or anaphoric, and if it is used prenominally (2), the prototypical function is recognitional (activating shared knowledge, see Diessel 1999). The prenominal intensifiers, as opposed to the postnominal, may take an *e*-suffix: *den derr**e** boka*. These extended variants are often analysed as inflected forms (e.g. by Faarlund et al. 1997: 211) because they resemble weak adjective inflection (3):

3. den **gul-e** bok-a
   that **yellow-DEF** book-DEF

A central dictionary of Old Norse, Fritzner (1886), suggest that all of the extended variants of *her/der*, such as *derre, derne, derrane,* etc., are derivatives of the Old Norse adverbs *hérna* and *þarna*. Thus, there are two hypotheses about the *e*-suffix in *herre* and *derre*:

a. The *e*-suffix in prenominal *herre/derre* is an inflectional suffix that expresses definiteness.

b. The prenominal intensifiers *herre/derre* have developed from the Old-Norse adverbs *hérna* and *þarna*, and are near-synonyms of *her/der*.

In my presentation, I will use data from the Nordic Dialect Corpus (Johannessen et al. 2009) and the Medieval Nordic Text Archive (Menota) to discuss the status of *her/der*-intensifiers in complex demonstratives. The research questions that I will address include: 1. How did the extended variants of adnominal and pronominal *her/der* develop? and 2. Is the development of prenominal *herre/derre* an example of recategorialization?

I will argue that none of the existing hypotheses (a., b.) are very satisfactory, but that hypothesis a. (the inflection hypothesis) is the more plausible of the two. The problem with hypothesis b. is that the Old Norwegian texts in Menota contain no examples of *hérna* or *þarna*, or of any complex demonstratives at all. Fritzner's references to the use of *hérna* and *þarna* are all from Old Icelandic sources, and it is reasonable to assume that these adverbs were used in Icelandic only, or that they were very infrequent in Old Norwegian. Another problem with hypothesis b. is the supposed phonetic assimilation of /rn/ to /r/, which is implausible – the expected outcome of this assimilation in Norwegian is /n/ (/hene, dene/).

There are a few problems with hypothesis a. as well. First, it is highly unlikely that the *e*-suffix expresses definiteness. If that were the case, the shorter variants *her* and *der* would be used with indefinite meaning, but they are not (cf. example 1). In addition, the extended variants may also be used with indefinite nouns, if it is used together with *sånn* 'such' (*en sånn derre bok* 'a kind of book'). Second, the *e*-suffix is optional in most dialects, and there is variation between *den der boka* and *den derre boka*.

A third possible hypothesis is that the *e*-suffix is on its way to become an inflectional suffix with a highly redundant meaning: It could simply express 'prenominal'. There are parallels to such "meaningless" affixes in other languages, for instance the *e*-suffix on adjectives in Afrikaans, which does not have any grammatical meaning (cf. Carstairs-McCarthy 1999: 120). The implications of this hypothesis will be outlined in my presentation.

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Upgrading through omission – an alternative to "degrammaticalization"

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"Degrammaticalization" changes have hitherto been described in two main types of approaches. In the traditional one, 'degrammaticalization' has been discussed merely as an opposite of 'grammaticalization'. Here, the main motivation for analysing 'degrammaticalization' was to make statements about the nature of grammaticalization. More recent approaches (most importantly, Norde 2009) attempt to study "degrammaticalization" on its own right. These approaches, rather than offering a common explanation of all upgrading changes under discussion, reveal most of all the heterogeneity of "degrammaticalization" changes. Generally, although there can be no doubt that linguistic changes by which an expression or construction gains in autonomy (in whatever respect) are attested, it remains disputed whether or to what extent alleged cases of "degrammaticalization" have common properties, except for the rather vague notion of a 'movement up the cline'. Moreover, one of the difficulties of both types of approaches is that upgrading changes of any kind are never analysed independently of those diagnostics that have been designed for studying 'grammaticalization'.

In this paper I would like to present an approach that suggests the complete independence of 'upgrading changes' from 'grammaticalization' phenomena. I argue that 'upgrading changes' – heterogeneous though they may be – have at least one feature in common which has not yet been considered in traditional accounts of 'degrammaticalization'. The linguistic expression which undergoes an upgrading process profits from the loss or breakdown of some other, concomitant element with which it usually collocates or with which it is usually incorporated into one construction. In this analysis, 'upgrading changes' are in principal motivated by the same mechanisms that trigger the conversion of modifiers into nouns: in nouns like *return* 'return ticket', *convertible* 'convertible car', the conversion is a consequence of the conventionalization of an ellipsis.

I will discuss a number of changes on different linguistic levels (syntax, morphology) which can be described as moving "up the cline". Convenient examples are modals that acquire full verb properties or particles that come to be used as nouns or verbs. I will try to demonstrate that whenever a linguistic expression gains in morphosyntactic autonomy, it is primarily the loss or the obsolescence of other, concomitant elements that causes this upgrading. It is thus not the upgraded element which becomes literally "de-grammaticalized", but the process of upgrading requires some surrounding element to be changing first. Only as a result of this, the remaining element is forced to take on functions or properties previously carried by the lost element – and

thus becomes upgraded. In other words, what is traditionally held to be "degrammaticalization" can be taken as a mere conventionalization of an elliptic construction.

This scenario would mean that the 'upgrading' of linguistic material necessarily requires a previous loss, reduction or erosion of concomitant material. If this hypothesis can be confirmed, we will gain an explanation of why linguistic forms occasionally develop in what seems to be the opposite direction of some major forces of language change (erosion, coalescence), without actually defying these forces.

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The Grammar of Medieval Scandinavian Personal Names in Continental manuscripts

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For the beginning of the Scandinavian Middle Ages, onomastic evidence is by the majority attested in runic inscriptions. Beside this, there is a large corpus of personal names found outside Scandinavia in a couple of *Libri vitae* and necrologies from Continental monasteries. The names are testimony of Scandinavian pilgrims travelling to Rome and other Christian centres in the 11th and 12th centuries.

To date, this Continental corpus has never been edited and studied as a whole. It is part of my project to fill this gap, and currently, data compilation and technical considerations for the database are in progress. While general and technical aspects of the corpus edition will be mentioned only briefly in this paper, my main aim is to explore theoretical and methodological approaches to analysing the grammar of these names. Many instances show interferences from German or Latin, some of them supposedly resulting from scripting by dictation. On the basis of examples from the Reichenau *Liber vitæ*, which comprises approximately 720 Scandinavian names, I will propose a model for graphemic, phonological and morphological analysis of personal names written in a multilingual historical context. Moreover, I will – beside codicological and philological aspects – address situational and functional factors, such as language and writing skills of actors and the pragmatics of names in *Libri vitæ*, and discuss their significance for grammatical analysis.

In conclusion, I would like to raise the question if and how such considerations should be included in the design of a corpus edition.

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Truth and hearsay in 17th-century Russian news translations

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In the 17th century, printed newspapers had begun to appear in many Western European countries. Russia, however, had not yet followed suit. That did not mean that Russia had no interest in news: on the contrary, selections of news items from imported – mainly German and

Dutch – papers were regularly translated at the Diplomatic Chancery in Moscow (in manuscript form) for the benefit of the tsar and the noblemen.

Regarding Western European printed newspapers and pamphlets, observations have been made on the linguistic features that were used to inform readers of the reliability of the reported information. Publishers of occasional prints, who wanted to attract potential customers, would emphasize the veracity of the contents; many English pamphlets, for instance, contained the words *true relation* in their titles (Brownlees 2014: 5). The publishers and editors of periodical papers, who wished to build trust on the part of their readers so that they would keep subscribing, seem to have used different strategies, taking more care to avoid exaggeration and characterizing information as hearsay to a higher degree (Gieseler 1996: 269).

In the case of the Russian news translations, there was no need for advertising single copies or building trust in subscribers, since there were no competitors on the market, and the tsar and the noblemen were the sole customers. The translators selected which items to translate, but such decisions seem to have been based entirely on subject matter (cf. Maier 2008: 89–108), not on the degree of reliability of the reports. In other words, the Russian texts were created in a very different situation. Nevertheless, the translators needed to deal with the reliability judgments they faced in the original texts, and although they did not need to attract customers, the translations did, after all, have recipients who were probably interested in the veracity of what they heard, which means that there was still a need for adequately rendering the degree of reliability of the information.

In this paper, I examine the translations of certain expressions relating to authenticity and hearsay in news translations from German and Dutch into Russian from 1669 and 1670 (cf. *Vesti-Kuranty* 2009). The Russian translations from these years, amounting to approximately 57 500 words, will be used as what I call the "large corpus". Not all translations have been matched to their source texts, but I will also use a "small corpus" consisting of those Russian texts for which German and Dutch originals have been identified (approximately 19 000 words), along with the originals in question (cf. Maier 2008). The aim of this paper is to examine if and how the translators took the self-proclaimed reliability of the source texts into consideration when translating. As has been observed on German material, such expressions belong to the so-called functional vocabulary of news texts, an area especially prone to the development of recurring, formulaic expressions (cf. Gloning 142–157). This allows a form-to-function approach and a quantitative analysis to be carried out on the large corpus, alongside the function-to-form approach and qualitative analysis applied to the small corpus.

In the large corpus, the 17th-century Russian words for 'news' (*věst'* or *vědomost'*) frequently co-occur with words meaning 'true' or 'truly' (mainly the adjective *podlinnyj* or the adverb *podlinno*). The small corpus confirms that words and phrases expressing a high degree of reliability in the German or Dutch news reports were almost always rendered in the Russian translations. However, they were not always translated literally; rather, a limited number of formulaic expressions were used in Russian, showing that the news translations were developing a set of characteristic expressions to which the translators resorted.

The dominating reportive marker in the large corpus is the Russian conjunction *budto* (often spelled *butto*), which had been used since the 16th century to introduce information marked as hearsay. Because of its additional function of comparison – it can often be translated

'as if' – it has an element of irreality, so that when used as a reportive marker, it implies that the quoted information is uncertain or even false (Borkovskij 1973: 90–91; Letučij 2008). In the German and Dutch originals, the reportive function was often filled by the use of the subjunctive in subordinate clauses (cf. Gloning 1996: 148–150 for German). In German, the use of the subjunctive in such contexts was merely an indicator of indirect speech (cf. Wiemer 2010: 77) and did not necessarily imply that the information was considered to be unreliable. The Dutch subjunctive seems to have been less neutral in this regard.

The small corpus confirms that the Russian *budto* expressed a higher degree of skepticism than the German or Dutch subjunctive: German or Dutch indirect speech with the subjunctive would usually be translated using the Russian conjunction *čto*, which did not in any way imply that the reported information was unreliable. Sometimes, however, the translators used *budto*, especially when the original news report cited several different sources or when doubt in the veracity of the information was expressed in some other way.

This study shows that although the Russian translations arose under different circumstances than the German and Dutch originals, and even though comments on the reliability of the reports were not needed for the same purposes, the translators usually took care to understand the position of the news correspondents or publishers and render it in an adequate way. It also confirms the existence of formulaic expressions in the Russian news translations, motivating further research on possible genre-specific features in these texts.

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Pragmatic differentiation of negative markers in the early stages of Jespersen's cycle in North Germanic

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Negative markers are frequently subject to a process of renewal: a new negative marker is created, initially co-occurring with an existing marker, finally coming to replace it (Jespersen's cycle, JC), as with French *ne* (stage I) > *ne … pas* (stage II) > *pas* (stage III) or English *ne* > *ne … not* > *not*. This observation raises the question of what drives the cycle, for instance, how Jespersen's cycle gathers momentum in its early stages (incipient JC). A satisfactory answer will involves both syntactic and semantic aspects. Syntactically, a new marker of negation must be re-analysed from some other source (typically a minimizer, a generalizer or an adverb of time). Semantically, it must in some way be distinct from the existing marker (to motivate its emergence in the first place), while ultimately coming to compete with its predecessor.

This distinctiveness has traditionally been viewed as a form of 'emphasis' with Jespersen's cycle seen as involving the bleaching of what was initially a marker of emphatic negation to become a marker of plain negation (Kiparsky & Condoravdi 2006). However, recent approaches have argued that emphasis in this context should be understood as involving cancellation of presupposition (Schwenter 2006, Hansen 2009, Hansen & Visconti 2009). Languages create new items to mark propositions which are both false and contrary to what (in context) could be expected to be true. Such negators are observed both synchronically e.g. (in relevant varieties) Italian *mica*, Catalan *pas* and historically as an intermediary stage between stage I and stage II of Jespersen's cycle.

Both French and English constitute historical examples. For French, Hansen shows that Old and Middle French *ne…pas* is associated with rejection of a previous statement, repetition of a denial, and denial of a presupposition or inference, while plain *ne* has none of these associations. Wallage further refines (and widens) this notion by defining five different discourse functions for negation: four discourse-old functions (denial of antecedent, repetition of antecedent, cancellation of inference, assertion of inference) plus the discourse-new function. He looks at the distribution of stage I (*ne*) and stage II (*ne…not*) in English, concluding that between 1150 and 1350, *ne…not* was specialized to a significant extent for discourse-old negation, while lone *ne* was specialized for discourse-new negation.

The discovery of such functional differentiation in Italian, French and English raises the question of whether this is found in the early stages of all shifts from stage I to stage II of Jespersen's cycle. This paper contributes to this question by investigating incipient Jespersen's cycle in early North Germanic (Old and Middle Norwegian).

Several changes in the expression of negation have taken place in the history of North Germanic. The inherited preverbal negative adverb *ne* was replaced by the suffixed negative *-a(t)*

via Jespersen's cycle; this was then replaced by other adverbs, primarily *eigi* and later its contracted form *ei*. These changes, which had largely taken place before the earliest extant alphabetic Old Norse texts, are well understood (Eythórsson 2002). However, *ei(gi)* was then replaced by a new adverb, *ekki*, originally the neuter nominative/accusative singular of the negative adjective/pronoun, in all of the North Germanic languages. This change has gone largely unstudied.

The replacement of *ei(gi)* by *ekki* did not follow the canonical progression of Jespersen's cycle in which the existing negative is first reinforced by the innovative form before becoming optional and then disappearing. Indeed, *ei(gi)* and *ekki* never co-occur in the same clause, and we witness instead a direct shift from stage I to stage III of Jespersen's cycle. We argue that *ekki* first gained an adverbial function in certain semantically and syntactically limited contexts, before losing these restrictions and competing directly with *ei(gi)*. Specifically, *ekki* first appeared outside its historically prior nominal function in comparative constructions ('no more'):

(1) kom ekki meira þa fram firir oss at þui sinn-i
come\PST[3SG] EKKI more then forward before us at DEM.N.DAT.SG time-DAT.SG
'No more [evidence] was brought before us at that time.' (*Diplomatarium Norvegicum* II.146, 1322)

It also occurred at this point as a negative adverb with clausal scope in presupposition-cancelling contexts:

(2) kast-ad-e herra Smiðr mote þess-are framfærd
oppose-PST-3SG lord Smiðr against this-F.DAT.SG course_of_action[DAT.SG]
þui at frv Eilin er loglega att-e
at
DEM.N.DAT.SG COMP lady Eilinn REL legally have_an_obligation\PST-3SG COMP
suar-a þessu mal-e var ecki till stæfn-d
answer-INF this.N.DAT.SG case-DAT.SG cop\PST.3SG EKKI to summon-PST.PTCP
at lyd-a þess-om vitn-um
COMP hear-INF this-N.DAT.PL testimony-DAT.PL
'Lord Smiðr opposed this course of action because Lady Eilinn, who had a legal obligation to answer this case, was not summoned to hear these testimonies.' (*Diplomatarium Norvegicum* XV.3, 1321)

It was only after losing its restriction to these two contexts that it came to compete directly with *ei(gi)* as the unmarked expression of clausal negation, at which point (around the start of the 16th century), it rapidly replaced it.

We will test this hypothesis by examining the use of *ekki* in a corpus of Old and Middle Norwegian. Specifically, we will use the *Diplomatarium Norvegicum*, a corpus of charters from or associated with Norway dating from the end of the twelfth to the mid sixteenth century and containing around 13,000 documents in a Nordic language. This constitutes the largest body of Old Norwegian and all extant Middle Norwegian. We will argue that two stages can be

distinguished: an early one whether the new marker of negation is pragmatically marked in terms familiar from these earlier studies, and a later period, where this function is lost and a rapid shift to full stage III is observed.

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Realignment in Yagaria

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Yagaria, a Trans-New-Guinean language, has what has been termed an object experiencer construction (Evans 2004) or an impersonal construction (Foley 1986). The experiencer is coded like an object according to verb agreement while 'subject' agreement has third singular reference as in (1). However, despite the object-like verb agreement switch-reference follows the experiencer (in part) and this evidences the subjecthood of the experiencer. This would thus appear to be a case of 'quirky' case manifest as verbal agreement (Windschuttel 2012).

(1) dagaea da-ha<no>k-Ø-e
1s 1SU-feel.well<PROG>-3s-IND
I am feeling well (hago- entry in Renck 1977)

Cole et al. (1980) theorised that such mismatches of coding and behavioural properties represent a construction in flux. The experiencer once had not only object coding but also object behavioural properties (and it is on its way to becoming a fully fledged subject and will eventually gain the appropriate coding as well). They compared similar experiencer constructions in different languages of the same family: Gothic where the experiencer was a true

object and Icelandic which exemplifies quirky case. But as Eythórsson and Barðdal (2005) point out that this did not actually exemplify this change (since Icelandic did not develop out of Gothic) and the possibility remained that both structures are diachronically stable.

In Yagaria, however, there is evidence that quirky marking of the experiencer is the result of reanalysis of a transitive construction as an intransitive construction. This is based on switch-reference—namely the existence of frozen switch-reference in serial verb constructions only consistent with a transitive verb with a third singular subject. Thus previously agreement did correspond to structural case and the experiencer was the object but this is no longer necessarily the case.

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Linguistic "Junk" and Meaning

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A basic tenet of cognitive linguistics is the strict mapping of meaning onto syntactic structures. Langacker (1987) states: "Cognitive grammar, by contrast, claims that lexicon, morphology, and syntax form a continuum of symbolic units serving to structure conceptual content for expressive purposes. It is incoherent to speak of grammar in isolation from meaning". The question which arises, and which I have been exploring for a while, is whether this strict mapping is true all the time, i.e. is it a basic fact about grammar? While falsification through examining all dialects of all languages at all diachronic stages to find truly semantically "empty" syntax is an impossible task, there should be other approaches to examining this hypothesis.

One path, explored in the present paper, is through an examination of *exaptation*, based on Roger Lass's "How to Do Things with Junk" (1990). In it he explores the utility of exaptation, a term and concept taken from evolutionary sciences and first developed by Gould and Vrba (1982). The idea, to be discussed here, is that language change (syntactic and/or morphological) may leave behind "junk", morphemes or even syntactic structures which are no longer used for crucial distinctions in the system and are therefore available to be put to other use. My question, then, is whether or not such material (to use a broad term) can be thought of as momentarily meaningless, or close to it, in the transition from one use to another. Illustrative data will be drawn from Germanic and Romance languages.

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Politeness and impoliteness: Middle English second person pronouns in Sir Malory's Arthurian love triangles.

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The purpose of the following research was to compare and contrast the appearances of *you* and *thou* in *TheWorks of Sir Thomas Malory* from the point of view of politeness and impoliteness.

With the framework provided by historical pragmatics and sociopragmatics, as defined by Leech (1983), Taavitsainen and Jucker (2003), and Culpeper (2011), this work disassembles Malory's text into such elements as the historical context, character's social position/position of power, solidarity, distance (Brown and Gilman 1960, 1972), possible intentions and Face Threatening Acts (as defined by Brown and Levinson, 1987). According to Kadar (p.c.), a pragmatic analysis cannot focus solely on linguistic aspects of an interaction, ignoring the multiple nodes accompanying it. Interactional multimodality helps understand a given utterance, situates it in more than the linguistic context. Although, Mahowald's (2012) quantitative analysis with the use of naive Bayesian classifierproves that exact context is not requisite in forming a scheme governing the usage of second person pronouns, the vocabulary surrounding a pronoun is an explanation 'how' these words were used, not 'why'. Therefore, presented analysis draws from the accomplishments of such researches as Jucker's analysis of *the Canterbury Tales* (2010), where he focused on the relationships between the characters and their behaviour in

terms of *curteise*, or the research performed by Byrne on Shakespeare (1936), where he managed to group the appearances of T/V pronouns according to the types of interactants.

The data was treated subjectively and qualitatively, from a pragmatic standpoint, taking into consideration all available information about the analysed situation or a character. Among the stories, there is a more popular and romanticised tale about King Arthur and his relationship with Guinevere and Lancelot. Another one is Malory's adaptation of the legend about Tristan, Isolde, and King Mark. Both plots focus on a sovereign being betrayed by his servant and wife, with a slightly different ending, however, equally tragic. Although Malory's version of 'Tristan and Isolde'is different and less elaborate than more modern adaptations, it was possible to draw some information from the interactions of the characters. More data is provided by the stories of King Arthur, his wife and Lancelot, as Camelot is the focal point of Malory's fiction.

The main goal of this presentation is to show a successive pragmatic analysis of a historical text, with the application of more than one theory or approach to the text. This allows establishing a scheme of the mechanics of showing Medieval (im)politeness in a particular literary work by the use of T/V pronouns.

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Pleonastic Uses of *se* as Latin Reflexes in the Old French Voice System

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Background: According to historical grammars of Old French (henceforth OF), we should find reflexive (1), reciprocal (2), middle/passive (3), anticausative (4), and impersonal *se*-constructions (5), known as constructions that are responsible for a change (reduction) in valency. While constructions (1)-(4) are attested in my corpus (corpus: *Base de français médiéval* (BFM) 40 texts, different genres, dating from 1113 to 1398, 1 315 623 words, examination of about 10,000 instances of *se* and some of its variants), though with uneven distribution, the impersonal *se* seems to be only very marginally possible on a semantic level without a full reanalysis on the syntactic level, giving up space for the French impersonal pronoun *on*. As for the construction in (3), we have to note that OF reflexive passives (as well as Modern French reflexive passives) show a tendency to have a middle "taste", which means that some kind of inherent characteristic is attributed to the passive subjects and the agent is generic.

However, OF also possesses a reflexive construction that has been dealt with in historical grammaticography, but which is mostly ignored in recent analyses. This use of *se* is rather peculiar as it occurs with intransitive verbs (unergatives as well as unaccusatives) and it is called ***pleonastic se***. Various historical grammars on OF attribute this construction the function of a DATIVUS COMMODI without elaborating much on its historical development or its functional status in OF syntax (cf. Nyrop 1979, Gamillscheg 1957, Adams 2013 *inter alia*). Until now, we only find descriptions that satisfy the idea of this construction being a formal way to indicate a special interest of the subject in the verbal action, which is a rather vague explanation that does not seem to capture the whole nature of this construction (cf. Jensen 1990). Others claim that *se* has some kind of aspectual function which nuances the meaning of the verbs in these contexts; however, this is only applicable to some instances (cf. Hatcher 1942; cf. Jensen 1990, Pearce 1990). Furthermore, Darmesteter (1922) mentions that in OF the whole class of intransitive verbs was optionally used with or without the reflexive. Brunot (1899) states that there was a tendency for intransitive verbs to change to pronominal conjugation.

The bigger picture/Analysis: The pleonastic *se*-construction as well as the other *se*-constructions mentioned above are by far no Romance innovation. As a matter of fact, we find most of these constructions (reflexive, reciprocal, anticausative, passive and pleonastic *se*) in Late Latin (some of them are also attested earlier). In more canonical uses, SE marks of course direct objects and SIBI indirect objects/dative of interest in which they mostly mark the affectedness of the subject. Furthermore, we find SIBI with a whole range of constructions (DATIVUS IUDICANTIS, DATIVUS SYMPATHETICUS, etc.). Various examples are attested in which no change in meaning is present. Furthermore, Cennamo (1999) shows that some of the non-canonical uses are related to the reorganization of the Latin voice system in which the R-forms are replaced by the analytic reflexive (SE/SIBI) markings (see also Cennamo 1998). By the 3rd and 4th centuries AD, we find pleonastic SE with intransitive mental process verbs and later on also with intransitive speech act verbs and intransitive state verbs, whereas SIBI pairs with non-inherently directed change of location verbs, with change of state verbs and with state verbs (location or relation). According to Cennamo (1999), SE is also found with intransitive speech act verbs and intransitive activity verbs in the 8th and 9th centuries. By the 4th and 5th centuries AD,

the R-forms get more and more replaced by the analytic SE and also SIBI + active verb patterns. By the 8th century the functional distinctions between the SE and SIBI are gradually lost and the two fall together and therefore we find SE with unaccusative verbs and SIBI with unergative verbs. According to Cennamo (1999), pleonastic (i.e. non-canonical uses of these reflexives) SE and SIBI can therefore be analyzed as markers for Split Intransitivity. The Romance languages of today have preserved SIBI + unaccusatives in directed change of location verbs as in *Mario se ne andò*. (Cennamo 1999: 141). Italian dialects like the Molisan varieties show this preservation even in more contexts.

The data in the analyzed corpus of the BFM show that the reflexive in general overwhelmingly often marks change of state verbs, verbs of directed change of location, verba sentiendi and verbs denoting cognitive processes. Here are some examples: *se gesir* 'to lie down', *se seoir* 'to sit down', *se ester* 'to stand', *se remanoir* 'to leave', *se aler* 'to go', *se venir* 'to come', *se fuir* 'to flee', *s'apareistre* 'to appear', *se craindre* 'to fear', *se demorer* 'to remain', *se dormir* 'to sleep', *se merveiller* 'to marvel', *se morir* 'to die', *se monter* 'to rise', *se partir* 'to part', *se remembrer 'to remember' etc. (BFM; Anglade 1965)*

The similarities between the situation described above and the OF uses of pleonastic *se* are striking. Although, we sometimes find a subtle change in the meaning of the verbs used alternatively with and without *se* (which might constitute residues of older stages, and more canonical uses of the SE/SIBI constellations (cf. Darmesteter (1922), Hatcher (1942) etc.), most of the unergatives and unaccusatives that are marked with pleonastic *se* in OF do not seem to adhere to semantic nuancing. Therefore, I argue that the pleonastic use of reflexives in OF is some kind of Latin left-over in order to mark non-transitive or low-transitive contexts as opposed to the more and more overtly formalizing strategy of promoting transitivity and the word order which comes with it as a kind of default case (cf. Cennamo/Eythórsson/Barðdal 2011). These are surface processes that denote a language system in flux with a reorganization of the voice system that had already begun in Latin and went on in the OF syntax system.

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An Emergence of a Novel Structure of "*The* + Adjective" Constructions in English

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This presentation attempts to show that there are two types of internal structures of "*the* + adjective" constructions in English (henceforth, N-adjectives), which function as a nominal expression, namely DP, even though they apparently lack a head noun. One is a traditional structure which contains a null noun *pro*, as is assumed in Kester (1996). The other is an innovative one in which, combined with a null derivational affix, the relevant adjective itself functions as a head noun.

In Present-day English (PE), N-adjectives like *the poor* in (1) refer to a group of poor people.

(1) *The poor* are often generous to each other.

The construction has been attested in English since the Old English (OE) period. The following example is taken from York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE).

(2) *ða cwican* no genihtsumedon þæt hi *ða deadan* bebyrigdan
'the living.PL no longer sufficed to bury the dead.PL'(cobede,Bede_1:11.50.3.448: o2)

Apparently, there has been no change in N-adjectives throughout the history of English. However, a significant change will be observed in the internal structure of N-adjectives when we focus on the availability of N-adjectives as a possessor in a prenominal position. In YCOE, we can find a number of genitive N-adjectives like (3), but Table 1 shows that they are almost impossible after the Middle English (ME) period.

(3) he nyle naht eaðe *þæs synfullan deað*

he not-want not easily that.SG.GEN sinful.SG.GEN death.SG.ACC
'he don't want the death of the wicked person' (coaelhom,ÆHom_16:47.2279:o3)

Table 1 The Frequency of Genitive N-adjectives (pre 100,000 words)

	EOE	LOE	EME	LME	E1	E2	E3
Freq.	40.7	24.0	0.2	0.1	0.0	0.2	0.2

Moreover, in a prescriptive grammar of English, the possessive marker *-'s* cannot be attached to N-adjectives. The following instruction is quoted from Swan (2005).

(4) Note that [*the* + adjective] cannot be used with a possessive *'s*.
the problems of ***the poor*** OR ***poor people's*** *problems*
(NOT ~~*the poor's problems*~~) (Swan 2005: 13)

But recently, some native speakers of English began to accept N-adjectives with the possessive marker *-'s*. The following example is taken from *Collins Wordbanks Online*.

(5) … *the newborn's* brain size reached its present value, (BU-f951356, US Book: 1995)

Therefore, N-adjectives were originally compatible with the prenominal position for a possessor phrase, but this compatibility was lost once, and it revived recently.

I claim that this distributional change of N-adjectives is attributed to the change of the derivation of N-adjectives and the historical change in the way to mark possessive.

N-adjectives could appear as a possessor phrase in a prenominal position, because the relevant adjective itself was inflected for case, that is, it appeared in its genitive form. In ME, however, the way to mark possessive changed: the genitive inflection came to behave like a clitic, as is evidenced by the rise of group genitives as in (6).

(6) but þe kyng of Fraunces men wer i-slawe
'But the king of France's men were slain'(CMPOLYCH, VII,349.380/Allen 2003: 16)

Suppose that the genitive inflection came to occupy the position outside of N-adjectives and be attached to them as a clitic (Abney (1987), Anderson (2008)). The difference in possessive marking accounts for a clear distinction in the distribution of N-adjectives as a possessor, if we assume with Kester (1996) that N-adjectives consist of the relevant adjective and a null noun *pro* associated with a feature set [+human, +generic, +plural] in PE, as in (7).

(7) [$_{DP}$ The poor *pro*$_{(+human, +generic, +plural)}$] are often generous to each other.

Suppose that a prenominal possessor phrase occupies the specifier position of DP. Then, genitive N-adjectives in (2) is analyzed as in (8), where possessive is marked within DP-POS in the specifier position of the larger DP.

(8) [$_{DP}$ [$_{DP\text{-}POS}$ þæs synfullan *pro*] [$_{D'}$ D [$_{NP}$ deað]]]

On the other hand, once the possessive marker *-'s* on D emerged, the null noun *pro* intervenes between the adjective and the clitic, as in (9), preventing its cliticisation to N-adjectives.

(9) [$_{DP}$ [$_{DP\text{-}POS}$ the poor *pro*] [$_{D'}$ -'s [$_{NP}$ problem]]]

The intervention effect has been observed as the prescriptive grammar says, but for some native speaker, as in (5), N-adjectives are compatible with the clitic *-'s*. This means that some, if not all, speakers analyze N-adjectives without the null noun *pro*. Instead, they are analyzed as

nouns derived by zero-derivation, as in (10).

(10) $[_{DP}$ The $[_{NP}$ $[_{N}$ poor^{A}+ϕ^{N}]]] are often generous to each other.

The history of zero-derivation in English supports the present analysis. According to Kastovsky (1992), the OE word *cum* is an example of zero-derivation from a verb 'come' to a noun 'guest'. However, zero-derivation was basically rare in OE and it started to be attested after the ME period (Ono and Nakao (1980)). Therefore, at least by the end of OE, N-adjectives cannot be an example of zero-derivation to nouns, but should be DP with the null noun *pro*.

In the present proposal, two types of N-adjectives suggest a possibility of the way to realize the modification relation between an adjective and a noun at different derivational stages, namely at narrow syntax and at pre-syntax.

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The Converbial Expressions in the Dullay Languages (East Cushitic)

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This study aims to show the situation regarding converbial expressions in the Dullay languages and its differences from other East Cushitic languages. It turns out that the Dullay converbial expressions form a tripartite system consisting of the gerundial, the converb, and the consecutive constructions. The former construction is a gerund followed by an instrumental suffix *=tta(y)* and is a simultaneous [-Person] converb. The latter two constructions use a finite verb called the consecutive and function as simultaneous [+Person] anterior and sequential converbs, respectively.

The tentative conclusion is that the syntactic and semantic analysis differentiates the consecutive verb from the typical East Cushitic converbs, and therefore the consecutive construction is certainly a Dullay innovation.

Banti (2010) studies the converbs (and their equivalent expressions) of Oromo and Saho-Afar with a brief reference to those of the Highland East Cushitic languages, Somali and the Dullay languages. He concludes that the combination of the prototypical converb (Ebert's (2008: 25) type A/A') and the finite verb suffixed by a conjunction is "by no means general in East Cushitic" (Banti 2010: 67).

As a result of the typological study of the motion event expressions (Yoshino 2014), a Dullay language called 'Alle (*alternatively*, Gawwada for Tosco (2008) etc.) appears to have two converbial expressions. One is the gerundial construction in which a gerund is followed by an instrumental suffix *=tta(y)* (see the example (1) below). The gerundial phrase appears anywhere between the subject and the main verb. The other is the consecutive construction consisting of a main verb followed by a 'non-final' linkage enclitic *=pa* and a consecutive verb (see (2-3)). The consecutive verb fully inflects for the same person, gender and number distinctions as the main verb, but with different sets of suffixes.

Although the gerundial construction is syntactically adverbial and analogous to the prototypical converb, the consecutive construction is typologically remarkable for its position in a sentence (see (2-3) for 'Alle and (4) for Ts'amakko) and its syntactic and semantic relations are significantly different in terms of the juncture-nexus types (cf. Van Valin & LaPolla 1997).

The converb construction is so far found only in Ts'amakko (cf. Savà 2005). The use of the consecutive verb in the pre-main verb position (i.e. a typically expected position of converbs in verb-final languages) differentiates Ts'amakko from 'Alle (see (5)).

Examples:

The gerundial construction:

(1) koʔas-e gangalaɗ-e-tta=kki manne gala xull-i-ti.
ball-F roll-GER-INS=FOC house under enter-EP-PFV.3SG.F
'A ball rolled into a house.' (*lit.* 'A ball entered a house, rolling.') ('Alle) (Yoshino 2014: 99, (3))

The consecutive construction:

(2) koʔas-e gangalat-ti=pa manne gala xull-i.
ball-F roll-PFV.3SG.F=LNK house under enter-CNS.3SG.F
'A ball rolled and entered a house.' *or* 'A ball rolled into a house.' ('Alle) (Yoshino 2014: 100, (5))

(3) qayna=kka an=aššˇ-n-a ʕanɗ-e ʕuk-á
tomorrow=FOC 1=go-FUT-IPFV.1SG water-PL drink-CNS.1SG
'Tomorrow I'll go and drink water' ('Alle) (Tosco 2008: 217, (28))

(4) gelzakk-o ʔingiy-e t-uusu ka ʕagalt-e=ma
baboon-M mother-F F-3SG.M.GEN FOC leather.sac-F=SIT
ʕaɗɗ-i ba sukk-as-o
put.in-UNM.3SG.M LNK roll.down-CAUS-CNS.3SG.M
'The baboon put his mother in a leather sac and let her roll down.' (Ts'amakko) (Savà 2005: 232)

The converb construction (the converb use of the consecutive verb):

(5) … kaʔʔ-u pacc-e=ma zow-u booħt-e=nu
… get.up-CNS.3SG.M field-PL=SIT go-CNS.3SG.M sow-GER=DEIX.DIST

zow-u ba zann-o q'omm-o ba
go-CNS.3SG.M LNK street-M eat.grains-CNS.3SG.M LNK
raaw-i
finish-UNM.3SG.M
'… he left, he went to the fields and on the road while he was going to sow he ate and finished them.' (Ts'amakko) (Savà 2005: 190)

Abbreviations

CNS consecutive verb
DEIX deictic clitic
DIST distant
F feminine
FOC focus clitic
FUT future tense
GEN genitive
GER gerund suffix
INS instrumental suffix
IPFV imperfective
LNK linkage clitic
M masculine
PFV perfective
PL plural
SG singular
SIT situative clitic
UNM unmarked verb
1 first person
2 second person
3 third person

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Taking borrowing seriously: Latin *-urC-* for *-orC-*

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A standard explanation for apparent exceptions to regular sound laws is that divergent words are borrowed from some other language or dialect after the time of the sound change. Borrowing as an explanation is most plausible when another language (/dialect) is known to have been in existence and in contact with the borrowing language, and can be shown to have undergone the same sound change as is visible in the words which are suspected to be borrowed. Often, however, handbooks of historical phonology simply identify these forms as loan-words, with little or no discussion of where they come from.

In this talk I will discuss cases of *-urC-* for expected *-orC-* in (standard) Latin in words like *currō* 'run' (not *corrō*), *furtum* 'theft' (not *fortum*), *sturnus* 'starling' (not *stornus*). I will show that previous attempts to explain this development as even a sporadic sound change are unsuccessful, and that instead they must be seen as loan-words; handbooks tend to speak vaguely of a 'dialectal' source, often with ambiguity as to whether this refers to a dialect of Latin, or a Sabellic 'dialect', i.e. language, such as Umbrian (the evidence for dialectal Latin is discussed by Adams 2013: 37-187; for the Sabellic languages see Wallace 2007). Rather than treating this as the end-point of the inquiry, I will show that an in-depth investigation of the question of the origin of the *-urC-* forms not only provides a more certain idea of where they came from, but also has far-reaching implications for understanding of the historical phonology of the Sabellic languages and the sub-grouping of Proto-Italic, the language family which includes Latin and the Sabellic languages.

In principle, an origin in dialectal Latin is rather plausible, since there is a certain amount of evidence which suggests a comparable raising of the vowel in the sequence *-erC-*, possibly of dialectal origin: the evidence consists both of epigraphically attested by-forms (e.g. STIRCUS for *stercus* 'dung'), and unexpected forms in standard Latin such as *firmus* 'firm' < **fermos*. However, there is no epigraphic evidence to suggest that the cases of *-urC-* have a dialectal distribution, and the raising of *-e-* to *-i-* should instead be seen in the light of a third and second century BC tendency for near-merger of *-i-* and *-e-*, as demonstrated by forms such as TREBIBOS for *tribibus* 'tribes'. Although standard Latin did not in general merge the two vowels, the existence of certain words in which the 'wrong' vowel was retained before *-r-* can be explained as due to the combination of this near-merger with the phonetic lowering effect of syllable-coda *-r-* on a preceding vowel, resulting in the adoption of hypercorrect forms such as *firmus* (the lowering effect of *-r-* can be seen in forms like *certus* 'certain' < **kirtos*).

Consequently, the apparently parallel case of *-urC-* for *-orC-* cannot be seen as connected, since here there was no near-merger of *-u-* and *-o-* to trigger hypercorrect *-urC-* forms.

Consequently, we must turn to the other possibility, that the *-urC-* words were borrowed from another language, and here we find a likely source in Umbrian, which has a similar feature in words like *curnaco* 'crow' for expected [x]*cornaco*. Up to now, the environment for this phenomenon in Umbrian has been uncertain due to a lack of attested forms, but taking the evidence of the Latin forms alongside that of Umbrian allows us to identify an environment common to both the Umbrian and the borrowed Latin forms: *-ur-* develops from inherited syllabic **-r-*. This discovery is particularly striking because the change of syllabic **-r-* to *-or-* has often been seen as one of the characteristic features of Proto-Italic; in fact it must now be seen as a language-specific development, with syllabic **-r-* becoming *-or-* in Latin and *-ur-* in Umbrian. Furthermore, there is even a difference in the reflex of syllabic **-r-* between Umbrian and Oscan, another Sabellic language, which shows *-ar-*, as I will demonstrate. This discovery adds further evidence to the observations of Clackson (2013) that the sub-grouping of the Sabellic languages is much more complicated than previously supposed.

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Splitting pathways:"Subjectification" and the grammaticalization of polyphonic structures

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There is general consensus that "subjectification" – i.e. a tendency towards a higher degree of encoding of the speaker's point of view – is a well-attested process in semantic change and plays a central role in grammaticalization theory. Nevertheless, the concept itself has remained a rather vague notion (Traugott 2010: 56) and it is questionable how it can be specified in a more precise manner. Furthermore, it is also an open question how it is interrelated to the development of (meta-)textual meanings (cf. Narrog 2014, Ghesquière 2010), i.e. the shift from *de re* ("the world being talked about") to *de dicto* meanings ("the speaker's organization of that

world in the act of speaking") (Traugott & Dasher 2002: 40).

Both questions are addressed in the paper through an analysis of the grammaticalization of the modal verb construction *sollen* ('shall') + inf. from Old High German to Modern High German. While *sollen* + inf. is commonly supposed to follow the well-known grammaticalization path from root modal to epistemic and evidential meanings (Traugott 1989, Bybee et al. 1994), the data analysis shows that its development departs from this attested pathway in (at least) three respects.

(i) Subjectification seems to start earlier than previous studies suggest since already Middle High German forms are characterized by the reference to an external source and by *de dicto* readings, whereby *suln* + inf. indicates that the embedded proposition is not part of the speaker's knowledge – a meaning which is for the German data commonly not expected until the 17th century (Diewald 1999: 421).
(ii)The preterite form of the modal verb develops a conditional use (e.g. *Sollte er sie je wiedersehen, würde er ihr die Meinung sagen.*) that neither displays pure root nor epistemic meaning (cf. analogously Breitbarth 2014 for the conditional *should* in English).
(iii)The preterite use of *sollen* + inf. in the so-called "Schicksalsfutur" / 'future of fate' (e.g. *Er sollte sie nie wieder sehen*. 'He was not to see her ever again.') in Modern High German does not display pure root meaning nor epistemic meaning either, but triggers a polyphonic effect on the textual surface by indicating a split between the narrator's and the protagonist's knowledge system.

In order to account for these different outcomes of the grammaticalization process in terms of subjectification, a semantic model is proposed that is based on the comparison of the diachronic unfolding of epistemic, evidential, and meta-textual meanings. As a result, it is argued that the concept of subjectification comprises in fact different micro-processes that are based on the common principle of third order intentionality – which again constitutes a core concept in the grammaticalization of polyphonic structures.

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On Mechanisms of Contact-Induced Syntactic Changes: Evidence from Mandarin Dialects in Western China

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Mandarin dialects and Mandarin-lexified hybrid languages in western China (with cases reported mainly from Gansu, Qinghai, Sichuan and Yunnan) exhibit various stages of contact-induced syntactic changes toward an OV typology.

The current paper, with both first- and second-hand data, aims to address three mechanisms responsible for the typological changes of the Mandarin dialects from VO to OV. The three mechanisms, as proposed in Heine & Kuteva (2003, 2005) and Heine (2008), are contact-induced grammaticalization, pragmatic unmarking, and construction type shift.

Contact-induced grammaticalization greatly contributes to the establishment of the case marking systems in those dialects. With new evidence from northwestern Yunnan, I propose two distinct geographic areas based on the sources of the dative-accusative markers, i.e. the Sichuan-Yunnan Area, where the positional word *shàng* denoting UPSIDE/UP grammaticalizes into a case marker, and the Gansu-Qinghai Area, where the positional word *xià* denoting DOWNSIDE/DOWN is also pressed into service to mark the dative and the accusative.

Pragmatic unmarking (or "demarking" as in Dik, 1997:44-47) is assumed to be transforming a marked STV topic construction into an unmarked SOV syntax. This mechanism can be evidenced by the fact that the disposal construction (i.e. the *bǎ* construction) sees relaxation of its restrictive use conditions in some Mandarin dialects in northwestern China, especially those in Xinjiang.

Construction type shift can be observed in the emergence of a new ordering of the copula construction, i.e. the S-PRED-COP word order. Based on synchronic data, it is hypothesized that the VP-not-VP copula construction goes through a process of functional shift from neutral-interrogative to negative-declarative, before its copula-final word order further extending to the affirmative context.

To be noted, these mechanisms come into play in intertwined processes rather than in isolated phenomena. Throughout the paper, I will highlight the pivotal role of the language-internal mechanisms and adjustments, without which it would be hardly possible for the mere external contact situations to effect significant typological changes on a language.

Key words Language contact, syntactic changes, word order, mechanisms, Mandarin dialects

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Chain shifts in Syntax: On the replacement of *th*- with *wh*-elements in Middle English

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Middle English inherited a system in which the *th*-elements *then* and *there* could function both as sentential adverbs as well as subordinators in adverbial clauses or in (free) relatives. However, the *th*-subordinators were gradually replaced by the *wh*-items *when* and *where* (for an overview, see e.g. Declerck 1997: 58-63). The relevant variation is illustrated in (1) for temporal clauses.

(1) a. **þanne** man forgiet þat he seien sholde. þanne beð his tunge alse hit cleued were
than one forgets what he say should then is his tongue as-if it stuck were.
'When a person forgets what he should say, then his tongue is as if it were stuck.'
(CMTRINIT,73.1005)

b. **hwen** hit alles kimeð forð þenne is hit geoleu atter
when it in-all comes forth then is it yellow venom
'When it finally comes out, then it is yellow venom'
(CMANCRIW-1,II.70.785)

In general, the two functions of the *th*-items were differentiated by distinct word order patterns. Verb-second order after *then* and *there* signaled an adverbial reading. In contrast, verb-final structures after *then* and *there* were used to indicate subordinate clauses (as in 1a). Once these word order patterns began to disappear, *th*-items frequently became ambiguous between paratactic (2a) and subordinating (2b) syntactic structure.

(2) **Tho** the screwe was overcome; Sori he was and wo.
then/when the villain was overcome, sorry he was and woe
a. 'Then the villain was overcome. He was sorry and miserable.'

b. 'When the villain was overcome, he was sorry and miserable.'
(*Life of St. Frideswide*, line 55)

Researchers have previously proposed the functionalist hypothesis that the "weak point in functional distinctness [between an adverb and] a subordinate or relative conjunction [is] an internal motive that caused *þanne* or *þa* to be replaced by *hwanne*" (Yamakawa 1969: 31, for criticism see Stockwell & Minkova 1991). However, this hypothesis has never before been explored quantitatively.

The present paper fills this gap in the literature. The data comes from the PPCME2 (Kroch & Taylor 2000) as well as c. 100,000 additional words of syntactically parsed poetic texts from the Middle English period. Logistic regression models are used to investigate predictions that follow from the hypothesis that the loss of certain word order patterns gave a grammar with designated subordinators an advantage over the old system. The results are as follows:
(i) The rise in *when* and *where* proceeds at the same rate of change, which means that the two changes are likely to be related (Kroch 1989).
(ii) A detailed study of the development of verb-second and verb-final word order patterns in early Middle English reveals that their decline does indeed immediately precede the rise of the *wh*-elements. The time trajectory of these changes replicates a fair number of earlier studies on this topic (e.g. Trips 2002).
(iii) Further, there is a striking parallelism between the low rate of remaining verb-final word order in subordinate clauses and the presence of *th*-subordinators. This correlation is significantly stronger than a regression model with time as the main predictor alone would suggest. The tendency for these two features to co-occur is particularly pronounced for the *th*-item *þo* (as opposed to *then*), which suggests that Middle English *þo* is an archaism that commonly retains the conservative word orders but is dropping out of the language. Other possible semantic and dialectal distinctions between *þo* and *then* will be discussed briefly.
(iv) Finally, other strategies can be used to force a subordinating reading on *th*-items, such as complex relativization (*then when*) (3a) overt complementizers (*then that*) (3b) or copy-correlatives (*then ... then*) (3c). Since these cases provide evidence of subordination independent of word order cues, it would be expected that *th*-items persist longer. It can be shown that the presence of disambiguating devices does indeed predict above chance the realization of subordinators as *th*-items.

(3) a. **... þanne huanne** þou zayst þi pater noster ...
then when you say your Pater Noster
'when you say your Pater Noster'
(CMAYENBI,101.1972)

b. **Þo þat** hit com to þe time Þat ...
When that it came to the time that ...
'When the time came ...'
(The Fox and the Wolf, line 263)

c. **Þa** þu þurch delidlich sunne Murðredest godes spuse þi saule.
When you through deadly sins murder God's spouse, your soul,

Þa þu were idemed for to beon ahonged on berninde wari-treo

then you were deemed for to be hanged on burning gallows
'When you murdered God's spouse, your soul, through the deadly sins, then you were judged to be hanged on a burning gallows'
(CMANCRIW-1,II.230.3323)

Hence, there is in fact considerable support for the functionalist scenario outlined above.

It is argued that the rise of the *wh*-items can be conceptualized as a syntactic parallel to phonological chain shifts. The loss of the word order patterns that used to condition the adverbial and subordinating functions of *th*-items leaves behind a functional gap in the subordinate clause system. As a consequence, *wh*-elements are "pulled" into that gap as a repair strategy. However, the word order developments are not a deterministic cause for the rise of *wh*-items. They merely result in a state of affairs, which, in conjunction with other factors such as parallel developments in nominal relative clauses, influence from French *wh*-items like *quand*, or the development of *wh*-based relatives, provides a fertile environment in which such a change would lead to a more economical system.

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'Special' verbal classes: Parallels between Greek deponents and German Inherent reflexives

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Inherent reflexives in German. The replacement of a DP by the reflexive pronoun 'sich' in German (a SE-Anaphor in the terminology of Reinhart & Reuland 1993) gives at least three verbal alternations in German: a. reflexives (1), b. reciprocals (2) and c. anticausatives (3). Some verbs in German, however, take SE while lacking transitive counterparts with a direct object being different from SE (4). These verbs are often referred to as 'Inherent (or intrinsic)

Reflexives' (*IRs*) and are considered as a special verbal class because of their property not to show the alternation found with reflexives, reciprocals and anticausatives seen in (1-3) and/or not to allow an NP different from SE. The asymmetrical function of SE in German IRs is claimed to give syntactically transitive but semantically intransitive verbs. The reason why IRs are analyzed as semantically intransitive verbs is because SE is semantically 'empty', i.e. not linked to a semantic argument. To this end, IRs cannot be derived structurally; on the contrary, they must be stored in the lexicon as such, representing a special class which necessarily requires the presence of SE. In this context, IRs are often discussed within the (In)Transitivity Theory as well as in Middle Voice approaches, being often parallelized to Deponent verbs found in Greek, Latin and Albanian (e.g. Kalluli 2013; Kemmer 1994; Reinhart & Siloni 2004; Steinbach 2002).

(1) a. Der Vater wäscht das Auto.
the father wash.3sg the car
'Father washes the car.'
b. Der Vater wäscht sich
the father wash.3sg SE
'Father washes himself.'

(2) a. Der Vater liebt sein Auto
the father love.3sg his car
'Father loves his car.'
b. Der Vater und die Mutter lieben sich
the father and the mother love-3sg SE
'Father and mother love each other.'

(3) a. Der Vater schloss die Tür
the father close.3sg the door
'Father closed the door.'
b. Die Tür schloss sich
the door close.3sg SE
'The door closes.'

(4) a. *Die Mutter betrinkt den Vater
the mother make-drunk.3sg the father
'The mother makes the father drunk.'
b. Der Vater betrinkt sich
the father make-drunk SE
'The father makes himself drunk.'

Deponent verbs in Greek. Similarly to German IRs, deponents in Greek are claimed to represent a special verbal class as well. Traditionally, deponents lack active transitive counterparts, and are considered as idiosyncratic verbs, representing a mismatch between syntax and semantics, since the morphology of deponents (non-active form (*NACT*)) gives semantically and syntactically transitive verbs with deponents, whereas the NACT's canonical function is to produce syntactically and semantically intransitive verbs, as in reflexives, reciprocals, anticausatives and passives (e.g. Embick & Marantz 2008). Contrary to the traditional view, Zombolou & Alexiadou (2013) showed that NACT has indeed a canonical function in (most of) these verbs. The statistical analysis of the deponents' corpus reveals that the majority of Modern Greek (*MG*) deponents are intransitive verbs with a reflexive/reciprocal or passive or anticausative meaning. Thus, the authors concluded that NACT has a canonical function, similar to the one of non-deponents. This is also diachronically supported. Recently, Zombolou & Alexiadou (2014) showed that deponents are the result of an ongoing process of losing and creating ACT transitive (causative) counterparts throughout the history of Greek. To this end, deponents do not represent a special verbal class stored in the lexicon, for they have been systematically produced both diachronically and synchronically. For instance, the verb *aminome* 'defend oneself' is a deponent verb in MG. However, it is reported to have a transitive, causative counterpart in Classical Greek, i.e. *amino* 'defend, ward/keep off' (5), which is no longer used in MG.

(5) Trōas amune neōn
Trojan.pl.acc ward/keep off.act.past.3sg ship.pl.gen
'He kept the Trojans off the ships.' (Homer, *Iliad*, 15.731)

Proposal. In the present paper, I propose that German IRs follow the same developmental, historical path as Greek deponents do, and therefore, German IRs do not represent a special verbal class either. Concretely, twenty-seven verbs are reported in DUDEN dictionary as being IRs in nowadays German. However, 85% of these verbs are reported in GRIMMs dictionary to have an active, causative counterpart in earlier stages of German (Old and Middle High German as well as Early Modern German). For instance, the verbs *sich betrinken* 'make oneself drunk' (6a), *sich verbrüdern* 'fraternize (< Bruder 'brother')' (7a) and *sich verspäten* 'be late' (8a) are reported in Modern German as IRs (DUDEN dictionary). In GRIMMs dictionary, the same verbs are found in a transitive, causative structure (6b-8b) in earlier stages of German. Finally, 7% of the examined verbs are not reported to have a transitive, causative counterpart, while 8% is not reported at all in GRIMMs.

(6) a. see example (4b)
b. er verstund die kunst briefe zu eröfnen, andre unterzuschieben, falsche nachrichten auszustreuen, leute zu **betrinken**, [...]. (J. E. Schlegel 5, 297)
'He was able to open people's letters, blaming others for this, […] and to make people drunk.'
(7) a. Er verbrüderte **sich** mit seiner Schwester gegen mich.
'He fraternized with his sister against me.'
b. ... ich, der ich seit dem zwanzigsten jahr den theil bekämpfe, der mich den thieren des feldes **verbrüdert**. (Wieland 4, 207)
' ...I who fights this part in me since I was twenty that makes me brother of the animals.'
(8) a. Der Zug hat **sich** um zehn Minuten verspätet. 'The train was delayed ten minutes.'
b. sam oft von afterriuwe ein sache wirdet niuwe, da in vestenunge **verspætet**: als falscheȝ herze rætet, so eȝ niht wol ist bestætet (Heinrich v. d. Türlin krone 134a)
'My stay in Jena delayed me; I would be very unhappy, if I could not have managed to go to Venice before Palmarum.'

As it is obvious from the examples in (6a-7a), the presence of SE gives reflexive, reciprocal and anticausative verbs, similarly to the canonical alternations seen in (1-3). Concretely, the examination of the corpus revealed that 52% of the examined verbs are reflexive verbs (both assuming position, e.g. *sich bücken* 'bend down (intr.)' and disjoint naturally reflexives, (6a), 33% are anticausative verbs (8a), and 15% are reciprocals (7a). The fact that IRs have either a reflexive or a reciprocal or an anticausative meaning, as well as the fact that IRs historically started out as transitive, causative verbs whose meaning is no longer used in Modern German disqualifies IRs from being a 'special verbal class', for IRs behave structurally like the non-inherent-reflexive verbs in (1-3). The difference between IRs and non-inherent-reflexives in (1-3) is that synchronically there is a semantic 'gap' in the transitive, causative structure in IRs, i.e. this meaning is out of use.

Semi-Inherent reflexives. Further support for the hypothesis that IRs are canonical verbs provides a second 'special verbal class' in German that can be termed as 'Semi-Inherent Reflexives' (*S-IRs*), parallel to Semi-deponent verbs in Greek. Although S-IRs are reported in DUDEN as being non-IRs, their transitive, causative counterpart is, however, according to DUDEN as well as native speakers, out of regular use and/or an archaism. We found twenty-five S-IRs. In (9b), for instance, the verb *bemühen* is used (almost) only with SE (i.e. *sich bemühen* 'try very hard, exert oneself'), while its transitive, causative counterpart in (9a) (i.e. *bemühen* 'burden, tire out, strain'; both examples are from DUDEN) is rarely used by native speakers and is considered by both speakers and DUDEN as an archaism. S-IRs show clearly that also synchronically there is an ongoing process of losing the transitive causative counterparts, similarly to the historical development of IRs discussed above. To this end, S-IRs will lose their transitive, causative counterparts and thus, they will appear with SE only (note that some of S-IRs are already considered as IRs in the literature (e.g. *sich erkälten* 'catch a cold', cf. Steinbach 2002).

(9) a. Dürfen wir Sie noch einmal bemühen?
may.1pl we you.acc one-more-time burden.inf
'May we burden you one more time.'

b. Ich will mich bemühen, pünktlich zu sein.
I want.1sg SE try-very-hard.inf punctual to be.inf
'I want to try very hard to be punctual.'

In sum, diachronical as well as synchronical evidence suggests an ongoing language change process that qualifies Inherent Reflexives in German as canonically produced verbs. To this end, we question the view that IRs build a 'special' verbal class. Cross-linguistically, a similar language change process is found in Greek with deponents. German IRs and Greek deponents follow the same language change path.

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WORKSHOPS

Diachronic Morphophonology: Lexical Accent Systems

The loss of lexical accent in Slavonic

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While Common Slavonic is reconstructed as having a morpheme-based system of the sort attested for older IE languages (2009), in some of its daughter languages (most of West Slavonic, and Macedonian in the South Slavonic branch) this has given way to purely phonologically determined stress. In the course of the gradual demise of morphologically conditioned accent, different assignment principles come to the fore, so that the history of these systems furnishes a compact case study of the interaction of typological parameters, allowing us to refine and expand the tools we use to analyze and describe accentual systems. Further, it illustrates a novel application of diachrony to the analysis of morphological paradigms: whereas generally their historic development is taken as explanatory, we argue that tracing the DISMANTLING of the paradigm is an especially useful tool for isolating its components and their interactions.

The reconstruction of accentual loss presents particular challenges, because it went unrecorded in texts and left no direct traces. However, there are areas where the transition from conservative to innovative systems plays out across the dialects, permitting a plausible reconstruction of the diachronic events (Baerman 1999). We base our observations on (largely 20th century) descriptions of dialects from two of these zones: (i) in Balkan Slavonic, from western Macedonia to western Bulgaria, and (ii) the transition between northern and southern Kashubian in northwestern Poland. These represent opposite ends of Slavonic speech territory, making the typological parallels all the more striking. Crucially, although in both cases the end result is phonological assignment of stress on an edge-defined syllable, what we observe along the way is not a systematic convergence onto this syllable, but a systemic reorganization along morphological principles that leads to drastic shifts between different stages. Table 1 shows a characteristic example from Kashubian, where the innovations leading to fixed initial stress involve moving stress off of the initial syllable.

	most conservative.....most innovative		
M SG	záprovadzəl	záprovadzəl	záprovadzəl
F SG	zaprovadzə̀la	zaprovadzə̀la	záprovadzəla
N SG	záprovadzəlo	zaprovadzə̀lo	záprovadzəlo

Table 1. Three stages of Kashubian 'lead.PST'

We suggest that the transition from a morpheme-based system to a phonologically motivated system was mediated through a paradigmatic system. Table 2 is an abstract

representation of the first type, in the form of the singular~plural paradigm of three lexemes. In Kiparsky's (2010) terms it is compositional: the accentuation of the word form is a function of the inherent accentual properties of its constituent formatives (morphemes), which are added together and subject to general morphophonological rules. For the sake of illustration, in this example the rule is: if one constituent is accented, it receives stress (underlined), if both constituents are accented the stem is stressed, while if both are unaccented stress is assigned phonologically (e.g. to the initial syllable). In broad terms this represents the ancestral system, with its variety of different accentual patterns.

	lexeme I	lexeme II	lexeme III
SG	stem-a	stem-a	stem-c
PL	stem-b	stem-b	stem-d

stem:	**affix:**
accented: lexeme I	*accented*: a, d
unaccented: lexemes II, III	*unaccented*: b, c

Table 2. Morphemic (compositional) type

In the paradigmatic type the assignment of stress is independent of the constituent formatives. The system shown in Table 3 has affix stress in the singular and stem stress in the plural, regardless of the affix and regardless of the lexeme. In this case a better analysis is to say that the accentuation is determined by the morphosyntactic paradigm, and not by the individual formatives that realize it.

	lexeme I	lexeme II	lexeme III
SG	stem-a	stem-a	stem-c
PL	stem-b	stem-b	stem-d

Table 3: Paradigmatic type

What the reconstructable history of these two areas within Slavonic shows is a shift in the locus of accent assignment from smaller to ever larger domains: in effect, the decreasing role of lexical specification. This is manifested by the loss of the arbitrary accentual classes characteristic of conservative varieties and their replacement by a single accentual principle that obtains over an entire word class. Phonology here plays only a passive role in the loss of lexical accent: it is not the driver of change, it merely picks up the pieces when the system falls apart. The loss of lexical accent on this view is a purely morphological change, not a phonological one.

The way in which these Slavonic languages have cycled through the accentual typology outlined here allows us to assess the analytical models commonly applied to such systems. In particular, we focus on Kiparsky's (2010) opposition of compositional and paradigmatic models. While he treats them as different APPROACHES, they imply different TYPES of system, both of which are manifested in the history of Slavonic. Any analytical uncertainty, at least in the languages investigated here, comes from the diachronic transition between the two types. In fact, even the most conservative attested system within Slavonic contains and admixture of the paradigmatic type, which increases in the more innovative varieties. The analytical task is thus

not to determine which is the right analysis, but to identify the division of labour between the two, and how this shifts over the course of history.

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The development of lexical stress in initial three-syllable windows in Tarahumara-Guarijío (Uto-Aztecan)

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In Tarahumara (Rarámuri) and Guarijío, two Uto-Aztecan (UA) languages of Northern Mexico, stress distribution is governed by a complex interplay between lexical and morphological factors and is restricted to an initial three-syllable window. While final three-syllable stress windows are not uncommon cross-linguistically, initial three-syllable windows were until recently thought to be unattested (Gordon 2002). Despite their typological relevance, the development of initial three-syllable windows is not yet well understood. Through examination of two well documented varieties, Choguita Rarámuri (henceforth CR; Caballero 2008, 2011) and Mountain Guarijío (henceforth MG; Miller 1996), this paper addresses the diachronic development of lexical stress in windows in these languages and examines what factors may contribute to the development of similar systems cross-linguistically.

The synchronic stress patterns of CR and MG have the following properties: (i) stress is lexically contrastive; (ii) stress is left-aligned and assigned to the first, second or third syllable in CR, and to the second or third syllable in MG; (iii) there are morphologically conditioned stress shifts; and (iv) lexical stress blocks these stress shifts. In suffixed words, both CR and MG have a contrast between lexically stressed (accented) roots and lexically unstressed (unaccented) roots. The former have fixed stress across morphological paradigms (e.g., MG: *ihí-na* 'drink-PRS', *ihí-ma* 'drink-FUT.SG'; CR: *bahí-li* 'drink-PST', *bahí-ma* 'drink-FUT.SG'), while the latter shift stress to the third syllable (the suffix) in certain morphological contexts (e.g., MG: *olá-ni* 'make-PRS', *ola-**má*** 'make-FUT.SG'; CR: *olá-li* 'make-PST', *oli-**méa*** 'make-FUT.SG'). The stress window is evidenced through alternations that maintain ternarity, as in MG prefixing plural/pluractional (PL) reduplication, where stress shifts leftward in reduplication to avoid fourth syllable stress (e.g., *ya~yawí-na* 'PL~dance-PRS' from *yawi-n**á*** 'dance-PRS') (Miller 1996: 48-49). A formal account of the Tarahumara-Guarijío pattern handles ternarity through a weakly layered foot and

no extrametricality (Caballero 2008, 2011), a device argued to generate the correct typology of stress window systems (Kager 2012).

Though UA prosodic systems display a significant amount of variation, lexical accent systems with complex morphophonological conditioning are well documented across the language family (e.g., Cupeño (Takic) (Hill and Hill 1968, Alderete 2001)). These various patterns are argued o have ultimately developed from a Proto-Uto-Aztecan (PUA) prosodic system that had contrastive vowel length, moraic coda consonants and a quantity-sensitive, left-edge trochaic stress system (Langacker 1977, Manaster-Ramer 1993; see also Hill 2011). The PUA stress system was not retained in many daughter languages due to the loss of coda consonants and/or the loss of contrastive vowel length. This was the case in Yaqui and Mayo, two closely related Cahitan languages grouped together with Tarahumara and Guarijío in a subgroup (Taracahitan). Yaqui and Mayo have vowel length contrasts but lost the PUA coda consonants, developing a lexical accent contrast between the first and second mora (Yaqui; Demers et al. 1999) and between the first and second syllable (Mayo (Hagberg 1988)). It has been proposed that Proto-Tarahumaran, the common ancestor to Tarahumara and Guarijío, lost both contrastive vowel length and coda consonants and innovated a rightward shift to second and third syllable stress from the first and second syllable stress patterns of Proto-Taracahitan (Miller 1985; see also Heath 1977).

The contrast between accented and unaccented roots and morphology-dependent stress alternations is reconstructed in a stage prior to Proto-Tarahumaran (Heath 1977, 1978). In addition to these lexical and morphological stress patterns, Proto-Tarahumaran had an iterative stress system that was not yet restricted to an initial three-syllable window. Evidence for this comes from the distribution of voiced plosives in CR and MG derived words, which reflects a process of metrically-conditioned plosive lenition. This process, still productive in MG, involves voicing of voiceless plosives in intervocalic position except in metrically prominent positions (i.e., as onsets of stressed syllables). This is exemplified in affixation (1a), compounding (1b), and plural/pluractional CV reduplication (1c) constructions (Miller 1996:35):

1)	a.	*pa**k**ó*	‘river’	*pa**g**o-čí*	‘river-LOC’
	b.	*so’**p**óri*	‘star’	*ari+só**b**ori*	‘evening+star’
	c.	***k**očí*	‘sleep’	*ko~**g**očí*	‘PL~sleep’

The conditioning environment of this lenition process was lost in Tarahumara due to the loss of word-initial syllables (consonant loss followed by aphaeresis in reduplicative environments) (Lionnet 1968, Miller 1985). Data from a Tarahumara variety documented in the late seventeenth century (Guadalajara 1683; cited in Miller 1985:503) that had not yet undergone aphaeresis suggests the following: (i) primary stress was assigned to the second syllable (2a-b) or the first syllable of the word (2c); (ii) secondary stress was assigned in alternating syllables (2a); and (iii) levelling of stress alternations between unreduplicated and reduplicated forms took place, rendering the distribution of voiced plosives opaque in reduplicated forms.

		Unreduplicated		Reduplicated		Gloss
2)	a.	*bahíboča* < **(ba.hí)(bočá)*		*a~pahípoča*	< *(*a.**p**á)(hi**p**ó)ča*	‘kneel’

b.	*bukú*	*(bu.**k**ú)*	*u~pugú* < **(u.**p**ú)gu*		‘cow’
c.	*péwa*	*(**p**é.wa)*	*i~béwa*	< **(í.**b**e)wa*	‘smoke’

The loss of word-initial syllables is also the source of lexical first syllable stress in Tarahumara (Miller 1996) (e.g., CR *nóča* – MG *inóča* ‘work’; CR *séba* – MG *ahséba* ‘reach’).

I propose that the three-syllable window developed in Proto-Tarahumaran through the reanalysis of a noun incorporation-specific stress rule. This rule, which is still productive in CR, requires the first syllable of the head of the construction, the second member, to bear stress (e.g., *busu+kási* ‘eye+break’ - *kasí* ‘break’; *kuta+bíri* ‘neck+twist’ – *bi’rí* ‘twist’). Incorporation is no longer productive in MG, but some isolated forms display the same pattern (e.g., *wahsi+lóa* ‘tail+move’ – *loá* ‘stir’). While the stress shift in these constructions may be attributed to the stress window, forms where the incorporated noun is monosyllabic (e.g., Norogachi Rarámuri *la+bíwa* ‘blood+clean’ – *bi’wá* ‘clean’ (Brambila 1953)) show that the source of the stress alternations in these cases is the incorporation stress rule. I contend that the reanalysis of this pattern into a stress window was facilitated by the morphological profile of Proto-Tarahumaran, which includes roots that are canonically disyllabic, a verbal morphology that is predominantly suffixing (through gradual loss of prefixing morphology), and the morphologically-conditioned stress alternations of unaccented stems. This paper will examine the similarities between this proposal and the historical development of an initial three syllable stress window in Azkoitia Basque (Hualde 1998). The broader contribution of unraveling the development of initial three-syllable in this language family lies in the better understanding of how these systems arise across languages.

Acquiring accentual (un)predictability in morphological domains: Root stress in Gitksan

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Recently, Kabak and Revithiadou (2009) discuss how lexical accent can arise in phonologically predictable stress systems when a morphological boundary is introduced, for example in compound structures. Lexical accent is argued to derive from increased morphological and phonological opacity in compounds over time. While their investigation was restricted to systems where stress appears at a word edge, I examine the consequences of this approach in a metrical system where stress is bound to a particular morphological domain. I argue that these systems are particularly vulnerable to a diachronic shift to lexical accent, and that the smaller the morphological domain upon which stress is dependent, the more likely lexical accent is to arise.

CASE STUDY: The language under investigation is Gitksan (Tsimshianic; BC, Canada). Here, stress is bound to the domain of the morphological root. Stress is possible on any syllable

in a four-syllable string, dependent on the position of the root (bolded in (1)), and neither inflectional nor derivational affixes shift the position of stress. Both prefixes and suffixes are common.

(1)	a.	[**bá**:**saχ**-an-dit]	'**separate**-TR-3PL'	'separate them'
	b.	[ʔan-sí:p̓-ɪn-sx^{w}-dit]	'NMZ-**like**-TR-ANTIP-3PL'	'their friend'
	c.	[ɬa-ɢa-ʦ̓ú:-dit]	'NMZ-DSTR-**other**-3PL'	'the others'
	d.	[ha-n̓i-ɢan-ẁín]	'NMZ-on-empty-**teeth**'	'gums'

This pattern is abundantly clear when roots are monosyllables, and this is indeed the preferential Tsimshianic root shape (Tarpent 1987). However, polysyllabic roots are also attested. These have previously been analyzed as final-stressed, with some exceptional penultimate-stressed forms derived via predictable epenthesis within a monosyllabic root. I argue that that the epenthesis analysis no longer holds in one major context: that of vowel length. While Rigsby (1986) argues that underlying CV:CC forms surface as penultimate-stressed CV́:CVC forms, I show that CV:CC forms surface as well. This motivates two distinct underlying shapes, undercutting the epenthesis approach. Further, loanwords with new phonological shapes have entered the language and maintained stress from the donor language, countering the predictions of the epenthesis approach.

With the predictability of an epenthetic approach to penultimate stress compromised in this way, it also becomes relevant that the productivity of a number of suffixes has deteriorated. Consider (2), an example of one such suffix, [-ɪxs], of unknown meaning. Though an affix can be distinguished when several forms are compared at once, the roots below do not surface independently elsewhere in the language, and a learner would be unable to identify the affix via alternations or semantic decomposition.

(2)	a.	[ʔá:ṫɪxs]	'come'	c.	[ʦ̓ál̓ɪxs]	'whirlpool'
	b.	[mó:ṫɪxs]	'chickenhawk'	d.	[k̓^{w}ádɪxs]	'flop around'

CLAIM: I argue that the Gitksan stress system has evolved from a domain-internal fixed-stress system into a domain-internal lexical accent system, for two basic reasons. (A) It is not possible for learners to assign stress predictably within the relevant morphological domain, and (B) it is not possible for learners to easily identify the historical edges of this domain in the first place.

In regards to the issue of phonological unpredictability, I show that not enough evidence remains in the synchronic system which supports the epenthesis rules that Rigsby (1986) originally posited. The underlying representations of some forms have been reanalyzed to match the surface. For the remaining forms, I argue with reference to Yang's (2005) model of linguistic productivity that learners cannot maintain an epenthesis analysis. Exceptions must be analyzed simply as exceptions.

In considering the issue of morphological opacity, it becomes clear that a learner of any root-bound stress system requires a significant degree of morphological awareness to determine if stress is assigned predictably within a polysyllabic root. Positing root-final stress in Gitksan assumes an ability to distinguish unstressed root syllables from unproductive, frozen morphology. I argue that this assumption is non-trivial, and particularly that over time, attempting to identify the edges of the morphological stress domain becomes a paradoxical and eventually arbitrary process for the learner. Should a form with unexpected stress be parsed as a

root and an affix, with the position of stress accounted for by their morphological breakdown, or as an atomic polysyllabic root? When such a decision becomes arbitrary, the situation is resolved by positing lexical accent. This situation is modeled in (3): different surface stress may result from historic complexity that has been lost.

(3) a. **Simplex:** xxx́

b. **Complex:** x́+x → x̲x́x

CONTRIBUTING FACTORS: I argue that two properties in the Gitksan system contribute to this diachronic shift to lexical accent. First is the small domain within which stress is assigned: when some affixes are excluded from stress assignment, the degradation of the morphological boundary between these affix and the stress domain will result in exceptionally stressed forms, just as Kabak and Revithiadou (2009) posit for compound structures in fixed-stress systems. When this domain is particularly small—as in Gitksan—more affixes have the potential to become frozen, and erode the possibility of making consistent generalizations. In short, a morphological stress system is only as stable as the morphological boundaries of the relevant stress domain.

The second factor concerns the directionality of predictable, domain-bound stress in the initial system, relative to the type of morphology found in the language. As Gitksan root-internal stress is right-headed, it is vulnerable to erosion on its rightmost edge: frozen suffixes. There are indeed numerous suffixes in this language, and thus a shift toward lexical accent is possible. If a language exhibits morphologically-bound stress but no affixes appear on the relevant head side of the domain, a more natural type of reanalysis might involve a shift in the size of the stress domain itself, to a larger morphological stem, or even to the whole word.

CONCLUSION AND IMPLICATIONS: This work demonstrates the predictions of Kabak and Revithiadou's (2009) proposal—that morphological opacity can trigger reanalysis to lexical accent—in a new domain, beyond that of compounds. I show how the degradation of morphological domain boundaries in a morphologically-conditioned stress system may be reanalyzed as pervasive inherent accentual marking. This work therefore leads us to a broader and more nuanced understanding of how lexical accent systems may be acquired, using evidence from an underdescribed language.

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Developments in the dissolution of the Indo-Iranian accentual system

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Early Vedic Sanskrit had a system of lexical accent which seems to preserve the PIE system rather faithfully, according to our current understanding. Therefore, it is also reconstructed for Proto-Indo-Iranian, although comparative data from Iranian have only been considered to a very limited extent. For a modelling of the development, this has the disadvantage that Indo-Aryan or Vedic innovations are difficult to distinguish from older, Indo-Iranian innovations, producing the danger that Vedic facts might be incorrectly projected into the protolanguages. The problem is of course that we do not have good information about the development of lexical accent in Iranian: There is very little if any direct evidence about accentuation in Old Iranian and much of Middle Iranian, and while indirect effects (cf. de Vaan 2003: 577-602) allow us to draw some conclusions about pre-Avestan accentuation being similar to Vedic, their contribution remains very limited. Probable effects of accentuation appear to show that most later Iranian languages lost lexical accent in favour of various weight-based systems (cf. especially the developments connected to the "rhythmic law" in Sogdian, see Sims-Williams 1984), but the details of these developments are not always very well understood. In addition, at least one modern Iranian language seems to have preserved lexical accent in principle, namely Pashto (cf. Morgenstierne 1973). However, even there we have good reasons to assume secondary developments that are not yet well understood (cf. Morgenstierne 1983: 172-3; Cheung 2010). E.g., it is not clear whether we have to take the presumed pre-Pashto accentuation of *mor* 'mother' < **mā́tar-* as original and therefore contradicting the evidence of Vedic *mātár-* (Tremblay 2003: 28-9, 129-30 with n. 58-9) or if we can assume an ictus shift from a light medial syllable to a heavy first syllable (as my preliminary investigation suggests).

A better understanding of the steps of all these changes may help us to understand the development in the older stages better. The same might be true for Indo-Aryan, too: Even if we have a good knowledge of Vedic accent, it is clear that this was not the only variety existing in Old Indo-Aryan. Also here lexical accent was lost in most languages, but not everywhere in the same fashion. Recently, it has also been found that some modern Indo-Aryan languages of the Northwest exhibit lexical accent synchronically and may partly preserve older lexical accent distinctions (cf. Liljegren 2008; Heegård Petersen 2012), and so their evidence may be used for additional information shedding light on tendencies that might already have begun to play a role in ancient times, and thus help us to get a clearer picture of archaisms and innovations in the development of the Indo-Iranian accentual systems. Here we can find similar problems as exemplified for Pashto above. E.g., Vedic *áṅgāra-* 'coal' is barytone but Kalasha *aŋgˈar*, Palula *aŋgˈoor* seem to presuppose **aṅgā́ra-* 'fire', which might be explained by an ictus shift to the medial heavy syllable. Other discrepancies are less easy to explain, viz. Palula *deçʰˈiṇu* vs. Vedic *dákṣiṇa-* 'right'.

The aim of my talk is to give an overview about the general development of the accentual systems in Indo-Iranian, focussing on the older stages but also investigating what modern data may add to our picture. One main point will be the influence of prosodic structure on the placement of the ictus which seems have some relevance even in those languages where lexical accent is present (and possibly preserved).

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Reconstructing Accentual Change: A Case Study fromIndo-European

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Scholarship on Indo-European accentuation routinely presses accentual discrepancies across languages or stages of the same language into service for the reconstruction of mobile accent and ablaut paradigms in (pre)Proto-Indo-European, an example thereof being earliest Vedic Sanskrit bhr-tí- 'bearing, gift' (Rigveda) vs. latest stage of Vedic prose bhr-ti- (ŚBM). From these two accents (suffix accented oxytone and leftmost accented) a paradigm is reconstructed *bhár-ti-, *bhṛ-téy-; there is no secure evidence for accent alternation within the paradigm, nor for vowel grada- tions, so the reconstruction requires subsequent levelings of accent position, vowel gradation, and accentual mobility to attain the attested forms. This

reconstruction (and its methodology) represents the standard approach, see e.g. Schaffner (2001:438ff.), Meier-Brügger (2010:342-3) (on the methodology of reconstructing pre-PIE, Schindler 1975:260-1 and Hale 2010). However, the evidence for the reconstruction has been challenged: Martin Kümmel (2014) has argued co- gently against using evidence from Indo-Iranian for the reconstruction of proterokinesis. To best explain the Indo-Iranian material, he promotes instead a "kompositionelle Interpretation" as developed and championed by Kiparsky (1973, 2010, fthcm.). In this paper I will extend the compositional analysis by offering a close philological assessment of the nominalizer suffix *-ti- (e.g. Rigvedic bhr-tí- 'bearing'). My main goal in analyzing this suffix anew is to show that a study with closer attention paid to the chronology of our texts necessitates a different reconstruc- tion entirely. Rather than seeing in e.g. bhrtí- : bhrti- evidence for leveled remains of a former paradigm, we have evidence only for an accentual change. In turn, I propose that the changes re- constructed for our forms are best explained in a model of a dual-route approach to exponence, as advocated by Pinker and Ullman 2002 and applied to the morphology-phonology interface by Bermúdez-Otero (2012). Besides contributing to the debates centered around the complex in- terplay of storage versus computation in accent assignment, such an analysis may contribute to our philological assessment of the ancient records by helping to segregate archaisms from innovations, as well as inform ongoing debates about the reconstruction of the parent language.

To illustrate the first case study, I will argue that for the abstract nominal suffix *-ti- the Vedic material should not be interpreted as leveled reflexes of the same paradigm, as the standard approach assumes, but rather as a case of diachronic change in the properties of the suffix, from inherently accented to unaccented, so bhr-tí- 'bearing' in the oldest textual layers yields to later bhr-ti- (ŚBM). We have for this suffix a clear diachronic trajectory, with increasing frequency of barytone stems like bhr-ti-, which become the rule by the end of the Vedic period (cf. Debrunner AiGr.2.2:631-632). I have not yet seen it observed that there is a direct correlation between those forms that remain oxytone longest and their high token frequency in the earliest texts, e.g. ūtí-'help' the most frequent noun by token frequency in the Rigveda (289x) remains oxytone all the way into the latest Vedic prose, the Brāhmaṇas. I will argue that we need to recognize the following stages in the history of this suffix:

I. In earliest Vedic the *-ti- nouns are built up analytically by productive rules of wordforma- tion, /bhar + tí/ → bhr-tí-.

II. The properties of the suffix change from accented to unaccented, likely owing to the heavy use of this suffix in compounds, with oxytonesis lost in derivation (Kiparsky 2010:§5).

III. Highly frequent items like ūtí- become listed in the lexicon with prespecified accent of the stem (i.e. they are not built up by morphology). We may say they are nonanalytically listed in the lexicon (in the sense of Bermúdez-Otero 2012:18-20): /ūtí-/ → utí-. Viewed as a class of -ti-/-tí- nouns, the new default pattern of accent sustains lexical exceptions.

One consequence of this approach is that Vedic can be shown to offer evidence only for a diachronic change from oxytone -tí- to unaccented -ti-. A further consequence is that the evi-

dence for accentual alternations from other branches of Indo-European might be seen in a new light; Ancient Greek, for instance, attests only leftmost, "recessive," accentuation for the cognate class, nouns in -sis (Chandler 1881:§641, Vendryes 1904:§223). This leftmost accent might be interpreted as reflecting the same changes Vedic undergoes, but in Greek's prehistory, thereby yielding a pattern of consistent leftmost accentuation exactly as we find in later Vedic. Further,

*-ti- stems in Germanic clearly reflect both oxytone and barytone accents, and this discrepancy has been put to the same use as Vedic (the two accents reflect paradigmatic mobility, with subse- quent levelings of accent and ablaut), but the evidence might also submit to an analysis identical to the one offered above for Vedic: most of the attested Germanic forms reflect barytones, but some few oxytones, and this latter group would then be analyzed as lexical exceptions which got preserved into the latest stage of Proto-Germanic (similarly Olander 2009:80-2, 96, Garrett 2011).

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Lexical accent in Romance: The back and forth of fixed and free stress

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As is well known, Latin, the common ancestor of modern Romance languages, had fixed stress on the penultimate or antepenultimate syllable, depending on the weight of the penultima (Allen 1973; Kent 1932). In many Romance languages, in contrast, stress is free and has been claimed to be heavily lexicalized by some (Loporcaro 2011), with the exception of French (and certain varieties of Occitan), where stress is entirely predictable.

The present study sketches the evolution from Latin stress to modern Romance, exploring how lexical accent has arisen in some systems (Italian, Spanish), and how it got lost in others (French, Occitan, at least in certain varieties or in certain word classes). An optimality-theoretic analysis is developed, drawing on standard constraints on foot structure to account for regular stress and on lexically-indexed constraints for the representation of lexical accent. It is shown how the parametric variation attested in modern Romance may have arisen from a small number of constraints on foot structure via constraint indexing and constraint re-ranking.

While Classical Latin stress is said to be predictable on phonological grounds alone, taking into account the moraic structure of the penultimate syllable (Mester 1994), the stress system necessarily had to change in later stages of Proto-Romance, due to the loss of underlying segmental, and in particular vocalic length, which made stress assignment to an open penultima (containing a previously long vowel) largely unpredictable (Bullock 2001). In general, the locus of the stressed syllable in a word has not changed in the course of diachronic evolution (Wanner 1979).

Italian may be said to continue the Latin system, at least to some degree (e.g., Krämer 2009; D'Imperio & Rosenthall 1999). The Spanish system, in contrast, has undergone significant reorganisation (for recent proposals cf., e.g., Roca 2006; Ohannesian 2004; Harris 1995; Oltra-Massuet & Arregi 2005). In both languages, exceptions to regular stress assignment persist, so that a significant proportion of lexical items must be specified for lexical accent. For Italian, the present analysis assumes that paroxytonic stress on words with a light penultima must be lexically specified, while in Spanish it is mainly the proparoxytonic pattern that is based on lexical accent. In Italian, but not in Spanish, morphemes specified with a lexical accent are particularly abundant in derivational morphology. In both Spanish and Italian, stress in verb

forms is heavily morphologized and cannot be assigned on the basis of metrical constraints alone; rather, paradigmatic structure has an important role to play (Meinschaefer 2011). The reasons for these changes from regular stress to lexical accent in some domains of the lexicon are mostly tied to patterns of vowel syncope and apocope, which had differential effects in Italian and Spanish, to be outlined in more detail in the proposed presentation.

In French, apocope has been far more productive than in Italian and French, which has lead to uniformly final stress, i.e., loss of lexical accent, throughout the lexicon (Di Cristo 1999; Di Cristo 2000). In particular, word-final apocope, together with other phonological processes that lead to the loss of much verbal inflectional morphology, may be said to be responsible for the loss of lexical accent in French. Finally, some varieties of Occitan are similar to Italian and Spanish in that they preserve lexical accent, in particular in proparoxytonic words (Roca 1999), while other have undergone substantial reorganization, mostly due to the re-introduction of distinctive vowel length as a result of compensatory lengthening. As an example for such varieties with an innovative fixed stress system, this presentation will consider the Lemosin variety (Javanaud 1981; Chabaneau 1876).

To account for these observations, the present study develops an optimality-theoretic analysis of Romance stress assignment which is based on standard constraints on metrical structure building (Kager 2007), complemented with the assumption that general constraints on metrical structure can also be lexically-indexed (Pater 2000; Pater 2009), which then accounts for lexical accent in specific domains of the lexicon. Such domains may be based on lexical category (e.g., verbs as opposed to nouns and adjectives), on morphological function (e.g., derivational affixes), or on etymology (e.g., learned words of Latin origin). The crucial advantage of the proposed analysis lies in the fact that it can account for the patterns of regular stress and lexical accent in the Romance languages mentioned above via simple re-ranking of the same three basic constraints on metrical structure building.

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Prosody, Parsing, and Productivity: Effects of Morphological Processing on Accentuation in Sanskrit and Ancient Greek

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In the prosodic systems of both Sanskrit and Ancient Greek (cf. generally Kiparsky 2010), some lexemes appear to possess a lexical accent, most often controlled by a derivational

suffix ("dominant" morphemes); in such lexemes, the surface accent ("ictus") typically remains fixed on the same syllable throughout an inflectional paradigm – see examples (1).a and (2).a. Other lexical items (some with clearly morphologically simplex stems, others not) exhibit a "default" phonological accent, and the ictus may alternate between the stem and an inflectional ending – see examples (1).b and (2).b.

(1) Sanskrit
  a. Lexical Accent: Stem /hast-ín-/ adj. 'having hands'
  i. acc.sg. /hast-ín-am/!hastínam
  ii. loc.sg. /hast-ín-í/!hastíni
  b. "Default" Accent: /bhū-/ 'earth'; /path-ā-/ 'path'
  i. acc.sg. /bhū-am/!bhū́vam; /path-ā-am/!páthām
  ii. loc.sg. /bhū-í/!bhūví; /path-ā-í/!pathí

(2) Ancient Greek (Attic-Ionic)
  a. Lexical Accent /edɛː-tú-/ 'food'
  i. acc.sg. /edɛː-tú-n/![edɛːtún]
  ii. gen.sg. /edɛː-tú-ós/![edɛːtúos]
  b. "Default" Accent /pod-/ 'foot'; /rɛː-si-/ 'discourse'; /anthrɔːpo-/ 'man'
  i. acc.sg. /pod-n/![póda]; /rɛː-si-n/![ré́ːsin]; /anthrɔːpo-n/![ánthrɔːpon]
  ii. gen.sg. /pod-ós/![podós]; /rɛː-si-ós/![ré́ːsios]; /anthrɔːpo-ós/![anthrɔ́ːpoːs]

The central question driving this study is: what differentiates "accented" stems from "unaccented" stems? Two crucial facts introduce complications that preclude the possibility of consistently applying a simple analytical approach (as carried out in the examples above):

1. lexical items apparently derived with the one and same suffix (e.g., nouns with the suffix [-ro-] in Greek) exhibit different accents ([ksurón] 'razor' vs. [ómbros] 'rainstorm'; cf. Probert 2006:Ch. 6)

2. the same lexical item exhibits a change in accentuation diachronically, which cannot be attributed to any purely phonological development concerning accentuation (e.g., early Vedic matí- 'mind' vs. later Vedic máti-; cf. Lundquist 2014).

This paper attempts a comprehensive account of these two issues. My particular claim is that "default" phonological accents (i.e., first syllable accent in Sanskrit, "recessive" accent in Greek), besides encompassing forms that are clearly morphological simplexes, tendentially apply to forms that undergo lexical production and processing holistically – they are not decomposed into their constituent morphemes. Logically, this situation obtains from the assumption that the application of lexical accents depends upon the presence of morphological structure; absent morphological structure, derivational morphemes cannot draw the ictus, and thus default phonological accents apply instead.

1 Psycholinguistic research from the 1950s into the present, across a wide variety of languages and employing various experimental paradigms (lexical decision tasks in both visual and aural modalities, eye tracking, masked priming, etc.), has robustly confirmed effects of both relative and absolute type and token frequencies on response times to morphologically complex words. See generally Diependaele et al. 2012 and Hay and Baayen 2003. One widely accepted interpretaton of all of these experimental results is a dual-route race model (Schreuder and Baayen 1995), wherein whole-word and parsed routes of lexical access compete to provide an

interpretation of an item in processing, or to generate an item in production. Factors that experimentally speed recognition (high token frequency, high root frequency, phonological transparency) are thought to support whole-word access, while factors that correlate with slower recognition in experimental settings are though to be indicative of parsed access. Lexical access overall thus depends upon the interplay of frequency between morphological elements in an item, as well as phonological and semantic transparency.

Thus, I hypothesize that a form such as Gk. [ksurón] 'razor' owes its accent to parsed access/production, i.e., /ksu-ró-n/. Conversely, the default phonological accent of Gk. [ómbros] 'rainstorm' is a consequence of holistic lexical access/production, i.e., /ombro-s/![ómbros].

This hypothesis is evaluated by way of a logistic regression model (Gelman and Hill 2006, Baayen 2008: ch. 6) incorporating numerous lexical frequency statistics drawn from two corpora: the two Greek epics, Iliad and Odyssey, and the Sanskrit religious poetry of the Ṛgveda. Some derived measures of morphological productivity (Baayen'sP andI statistics), and phonological and semantic parameters, are included as well. Two-way analysis of variance and principle components analysis assess the relative significance of these parameters. This model accounts for the two problems posed above as differences in parsability across lexical items, and changes in parsability diachronically; it further indicates what parameters are most crucial to morphological parsing generally.

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Diachronic syntax and (modern) parametric theory

Macroparametric space and the learning procedure

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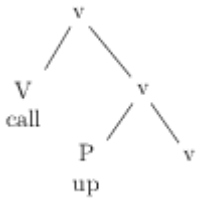
Literature critical of grammatical parameters has identified significant problems, both empirical and conceptual, in the growth of parametric space necessary to accomodate small, local cross-linguistic variation, i.e. microparameters (Newmeyer, 2005; Pinker, 2009, among many). A general solution is sketched in this talk; I show how a small set of initial macroparameters—potential '3rd factor' choices (Chomsky, 2005; Biberauer *et al*., 2013)—may be fractured by a novel learning algorithm into a more complex parametric space on the basis of exposure to the PLD. In this model, micro/nano-parametric complexity is derivative and limited, and parametric space is exponentially more constrained. Some of the initial problems and the general solution are illustrated with data involving multiple head-ovement (MHM; Collins 2002) in English, Slavic, and Algonquian grammars, three language types in which this phenomena is employed to different extents.

English grammar uses MHM only optionally and only in the derivation of verb-particle word order alternations. The (1a) order preserves the base position of the particle; in (1b), MHM triggered by v displaces first the root V, then the particle, and tucking-in head-adjunction forms the v^0 structure (2).

(1) a. Jeff called his accountant up.
b. Jeff called up his accountant.
c. Jeff called him up
d. *Jeff called up him.

(2)



As MHM is more sensitive to *Relativised Minimality* contexts than regular head-movement is, pronouns (=X^0) serve as defective interveners in particle-shift MHM: (1d).

In Russian, T and secondary imperfective Asp *-yva-* each trigger MHM to unite verbs and perfective prefixes; in (3), *-yva-* attracts first *za-*, then the verb root *pis*, and then T attracts *po-*, *pere-*, and *za-pis-yva*, in turn.

(3) **Vasja po-pere-za-pis-yva-l diski.**
Vasja DELIM-REPET-behind-write-IMPF-PAST CDs
'Vasja spent some time re-recording CDs.' (Tatevosov, 2011)

Algonquian languages make still more extensive use of MHM, with virtually all movement-triggering categories involved: v, T, n, D, p, Fin (Branigan, 2012; McCulloch, 2013).

In the Innu-aimûn (4), v attracts V *-tâ*, then *ishkueu*; T later attracts resultative *kushpi-*, then *tâ-ishkueu*. Examples from other categories equally complex and more so, will illustrate the general pattern.

(4) **kushpi-tâ-ishkueu-eu**
bushwards-accompany-woman-PRES.3
's/he goes into the bush with a woman'

An entirely microparametric account of this range of variation would require that Algonquian children set a number of independant parameters, one for each movement-triggering head. This ignores the generality of the pattern, and fails to capture the diachronic stability of this feature of Algonquian languages generally. A purely macroparametric account would suit the Algonquian data, but cannot accomodate the more limited role played by MHM in English and Slavic grammars. The latter are better accomodated by an entirely microparametric model. I split the difference with a model in which UG provides only a small set of macroparameters, including one (P^{MHM}) which legitimates MHM for all movement-triggering probes, but where parameters with smaller scope are generated at need from this initial endowment.

Suppose the initial state for P^{MHM} is set to discourage MHM; exposure to common data like (4) triggers a change which immediately licenses MHM for all pertinent categories, and the ease and speed of acquisition is consistent with diachronic stability. In English and Slavic, the presence of non-intervening small constituents (pronouns and adverbs) internal to the clause forces a generally negative setting to P^{MHM}, but other data requires a positive setting for the same parameter, i.e. V-particle object order in English; perfective prefixal verbs in Slavic. The learning algorithm responds to the inconsistent data by identifying a context in a given datum which does not match the currect general setting of P^{MHM} which might be associated with a different setting, therefore splitting the domain of application of the parameter. If this provides a means to process the datum, the parameter split is reinforced going forward

Yang's (2002) evolutionary parametric model is extended to implement this new approach. The learning algorithm LA provided by UG begins with an initial parameter array: Γ_0, but in this model these choices must have macroparametric scope. Γ_0 cannot include parameters which describe how verbs behave, or finite T, or nonspecific indefinite D. Instead, Γ_0 can identify a specific property, like head-finality, for all heads, whatever their categorial (or other) features happen to be. This ensures the size of Γ_0 will be small. LA responds to the presence of an utterance Σ in the child's linguistic input by formulating an array of random initial values for the individual rules in Γ_0.: Γ_1 And this initial array is employed to try to parse Σ. If the parse is successful, then—as in Yang's model—the values of each individual rule p in Γ_1 record that successful result, and that rule setting will become that much more likely to be chosen in future iterations. But if the parse fails, then the response of LA is more nuanced and responsive than in Yang's model. If the parse of Σ using Γ_1 fails, then LA forms a second array Γ'_1, which differs from Γ_1 only in the value of a randomly selected member of Γ_1. In other words, LA finds one member p in Γ_1, and replaces its value with the opposite value. (If p is the head parameter, and p is head-final in Γ_1, then p is head-initial in Γ'_1.) A second attempt to parse i is then carried out, using Γ'_1 in place of Γ_1. If this succeeds, that each value in Γ'_1 will record that result. But if both

Γ_1 and Γ'_1 fail to enable a successful parse of Σ, then a new strategy is available to try to find a better grammar. Γ_1 and Γ'_1 differ in the value of p, and at this point neither value of p has improved the result. LA therefore examines Σ to find a token of a natural class C for which p is relevant, and constructs two new parameters, p' and p", in which p' characterises C alone, and p" applies to everything else. For example, if P^{EPP} establishes whether probes trigger EPP effects, and neither a positive nor a negative value for P^{EPP} has enabled a successful parse, the LA can replace P^{EPP} (in Γ_1) with two new rules: P'^{EPP} and P''^{EPP}, where P'^{EPP} might specify whether T probes trigger EPP effects and P''^{EPP} specifies whether all other probes do so. And then a new, longer array Γ''_1 i can be formed by replacing p in Γ_1 with p' and p", where both new parameters are assigned arbitrary values. And a final parse of Σ is attempted, using Γ''_1. If this parse fails, too, then the new p' and p" parameters are simply forgotten (although they may be regenerated in a subsequent iteration). If this parse succeeds, however, then that success is recorded for each rule in Γ''_1 , including the new parameters, which therefore persist in the LA as optional alternatives to p. When the next utterance Σ_2 is perceived, LA starts up the process once more, but this time with the results of evaluation of Σ in place. A new rule array Γ_2 must be generated to try to parse Σ_2. If either Γ_1 or Γ'_1 enabled a successful parse of Σ, then each of the parameter values in that successful rule array will have a probabilistic advantage over the opposing values when Γ_2 is constructed. And if Γ''_1, containing the new parameters p' and p" was successful, then the pair {p', p'}'—with the values established in Γ''_1 —will have a slight advantage over either possible value of the more inclusive rule p. But whatever parameter array is selected for Γ_2 will be employed and sometimes extended in the same procedure as before.

This approach eliminates nano/micro/meso-parameters from the initial UG endowment, in favor of a responsive LAD which dynamically generates small(ish)-scale parameters when needed. In the remaining moments, a comparison is made between this model and that of Biberauer *et al*. (2013), and the implications for language change/stability are explored.

Greek and Romance in Southern Italy: a syntactic phylogeny

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Goals. In this paper we use modern parametric syntax to explore historical relations across Romance and Greek dialects in Southern Italy, and in particular to address two questions which are usually investigated by traditional dialectology and historical linguistics mainly through the analysis of lexical data: **1.** Can parametric syntax help reconstruct a plausible phylogeny for Greek and Romance varieties in Southern Italy? **2.** Can parametric syntax identify the amount of contact among such varieties?

Methods. Our central analytic tool is the Parametric Comparison Method (PCM, Guardiano and Longobardi 2005, Longobardi and Guardiano 2009), which computes parametric distances among sets of languages and prompts the automatic construction of phylogenies. The PCM opens the possibility of combining insights from formal grammar, historical-comparative linguistics, quantitative sociolinguistics (dialectometry), and computer-assisted techniques to study vertical and horizontal transmission of languages (Longobardi et al 2013).

Data and experiments. Southern Italy is an ideal testing ground, for long-known historical and sociolinguistic reasons. In this area, we collected syntactic data from the nominal domain in seven Romance varieties (three in Sicily: Ragusa, Mussomeli and the Gallo-Italic dialect of Aidone; two in Calabria: Reggio Calabria and Verbicaro; one in Salento, and, finally, standard Italian), four Greek ones (the two Greek dialects of Southern Italy: Salentino Greek and Southern Calabria Greek; Cypriot and standard Modern Greek), and their ancestors (Latin and two varieties of Ancient Greek); after computing parametric distances (using the PCM), we built syntactic trees and networks, and performed various statistical experiments; subsequently, to pursue a comparison between the historical development of lexicon and syntax, we measured the results of comparative syntax against those produced by lexical data (collected using a 207 Swadesh list, along the model of Dyen, Kruskal, Black 1992). Based on these analyses, we were able to study the degree of correspondence between both phylogenies (the lexical and the syntactic one) and the relative impact of borrowing on either of them.

Results. It is possible to argue that parametric information alone is a good predictor of the genealogical histories of Greek and Romance in Southern Italy, in spite of some detectable but controllable amount of secondary convergence, affecting syntax as well as the vocabulary.

In none of our experiments, indeed, is the impact of contact such as to obscure the very genealogical relations among the varieties examined: the Romance group is systematically classified separately from the Greek one (even when ancient languages are included). Furthermore, the internal classification of the two groups resembles the areal distribution of the varieties: within Romance, the Southern varieties are separated from the rest, and, within the Southern cluster, the three dialects from Sicily are kept together (showing syntactic uniformity, as opposed to non-Sicilian dialects). Similarly, within Greek, the two dialects in Southern Italy are kept apart from Cypriot and Modern Greek.

A closer inspection of the distribution of parameter values shows that some particular subdomains are particularly sensitive to areal constraints, while others are more homogeneous diachronically (Guardiano 2014).

On the all, parametric contact happens to be monodirectional, from Romance into Greek (Ledgeway 2013). However, there are also parametrically identifiable traces of a micro-linguistic area. For instance, within the subdomain of adjectival modification (Guardiano and Stavrou

2014), the Greek and Romance dialects of Southern Italy share identical parameter values, as opposed to the rest of Greek and Romance, respectively: such a dialectal micro-area presumably results from contact events.

As a counterpart, other parameter subsets are distributed more uniformly, both diachronically and synchronically, within each genealogical group.

Conclusions. We claim that it is plausible to identify selective subdomains of syntax that are more sensible to contact-induced parameter resetting or, vice-versa, more impermeable to the pressure of contact: however, our crucial conjecture is that this must be always relativized to the general parametric layout of the languages in contact.

This way, we conclude that the PCM can not only be used for the purpose of long-range historical comparisons, but also successfully implemented as a device to describe and explain microvariation at a local and chronologically shallower level.

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What diachrony tells us about the pro-drop parameter

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1. Two views on parameters and their diachronic mirror. A debate that is often implicit in different approaches to syntactic change is the question of its universality. Descriptive typological accounts (e.g. diachronic typology) assume this universality, while formal accounts

experienced a shift in the thinking paradigm (Gallego 2011): (i) the P&P view relied on the existence of UG parameters, which included two or more settings; (ii) a recent trend in minimalism tries to reduce the properties of UG to general principles and interface conditions. As for historical accounts, finding a stable path of change from one setting into another could be an argument in favor of the classic parameters. However, proving that what looks like a universal change from a setting into another in different languages is not a unified phenomenon can be an argument against the classical concept of parameter.

2. The core hypothesis. We argue that at least certain parameters can be reduced to bundles of properties which, together, produce the effect that some languages are more similar between them than with respect to others. In this sense, we adopt Boeckx's (2011) suggestion about the "clustering effects", discussed by e.g. Biberauer (2008): similar linguistic properties tend to "cluster" in similar patterns, but leave room for at least slight differences in this clustering way. If we prove the existence of different change pathways, which stem from contingent / environmental acquisitional ("second factor") reasons, giving rise to slight differences between languages, we can achieve a satisfactory explanation for those parametrical "mismatches".

3. Change in the patterns of pro-drop. We check this hypothesis on the "pro-drop parameter", exploring the idea that pro-drop is not a uniform syntactic phenomenon, but merely a PF-phenomenon (deletion) which is affected by particular morphosyntactic properties in different ways in different languages.

The synchronic analysis. We adopt the hypothesis that null arguments, rather than inherently null pronouns, are *deleted* expressions (cf. Saito 2007, Sheehan 2007, Roberts 2010). Deletion is the operation that results in a syntactic object not being phonetically realized. Whether it involves PF-deletion (cf. Merchant 2001) or LF-copying (cf. Lobeck 1995, Saito 2007), deletion takes place late in the derivation, after syntax. Therefore, like copy-deletion (Nunes 2004) or VP-ellipsis (Goldberg 2005), pro-drop can in principle be blocked in a given derivation because of independent grammatical factors. This idea opens the possibility to explain the patterns of pro-drop across languages in terms of the blocking of deletion. For instance, it could be that the non-pro-drop phenomenon (e.g. English, German, etc.) reduces to cases in which deletion is blocked by independent grammatical properties (cf. Duguine 2013).

The diachronic analysis: pathways of losing consistent pro-drop. We explore this approach to the pro-drop phenomenon from the perspective of language change in the following sense: if grammatical factors of different kinds can block deletion, we predict that change in the patterns of pro-drop across languages can follow different paths, as they can be produced by different triggers. This fact has been noticed before in the literature, namely, in accounting for the diachronic paths developing non-NS patterns vs. partial-NS patterns (Roberts (2011) on French *vs*. Brazilian Portuguese (BP)). Here, we will argue that the loss of consistent subject-drop, yielding a partial-NS pattern, can also display different pathways of change. We will focus on two case-studies, BP and Russian; in BP, on the one hand, the emergence of new restrictions

in licensing NSs correlates with the 'weakening' of the person inflectional paradigm (resulting from a rearrangement in the pronominal system; cf. Duarte 1993, Nunes 2011). In Russian, on the other hand, new bans on NSs arose from the rearrangement of the whole verbal system from tense-based into aspect-based, in conjunction with the loss of V-to-T movement and clitic auxiliaries (Jung 2014).

4. The contribution of language change to the parametric account. An important advantage of the analysis is that it solves a tension present in the diachronic studies of pro-drop. The (macro)parametric approach to language change views the loss of pro-drop as the change from one setting of the "pro-drop parameter" to another. The fact that non-pro-drop languages tend to have "poor" subject-agreement morphology (the so-called Taraldsen's (1980) Generalization) can make us postulate that changes in the properties of person/number verbal morphology trigger a change in pro-drop. This hypothesis is particularly interesting from the point of view of the parametric approach, because it constitutes the diachronic counterpart to the hypothesis that the nature of inflection place a crucial role in the licensing of null subjects (cf. Barbosa 1995, Alexiadou & Anagnostopoulou 1998). Nonetheless, it is not backed up empirically, as noted by Roberts (2011). It also contrasts strongly with the results obtained above on Russian, and other case-studies, which show that the relation between the weakening of agreement and the loss of consistent pro-drop is not a causal one (cf. *Sigurðsson* (1993) on Icelandic). Our analysis, on the other hand, reconciles the theory of change with the data, because it predicts that the loss of pro-drop can adopt a variety of pathways.

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A Population Dynamic Mechanism for the Constant Rate Effect (and Beyond)

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Summary. In a seminal work in diachronic generative syntax, Kroch (1989) proposed the Constant Rate Hypothesis, given here in (1).

(1) "[W]hen one grammatical option replaces another with which it is in competition across a set of linguistic contexts, the rate of replacement, properly measured, is the same in all of them." (Kroch 1989: 200)

Initially (and still logically) a hypothesis, the notion of a constant rate has accumulated enough support over the last two decades for (1) to be referred to as the Constant Rate Effect (see e.g. Pintzuk 2003: 511). Given this empirical support, the CRE has been successfully used to argue for approaches to language in which syntactic variation consists not in lexical or contextual idiosyncrasies but in the values of a finite number of universal parameters.

However, neither Kroch (1989) nor subsequent studies have elucidated what the population-level mechanism giving rise to the CRE might be. As a diachronic effect observed on the basis of large and heterogeneous corpora, the CRE is (*inter alia*) a population-level property of language communities, but so far no population-dynamical model of its emergence has been presented. In this paper, we propose such a model in what is arguably the simplest possible way of doing so, and show that even this simple model is rich enough to capture the CRE. On the other hand, we show that for suitable parameter settings the model can also explain recalcitrant findings which appear to refute the CRE. That the same mechanism can generate both CRE-

sustaining and CRE-suppressing behaviour points to the conclusion that the CRE may not be a universal property of language diachrony, but rather a default mode in which language operates under normal circumstances.

Model. We assume, with Kroch (1989), that a single parametric switch is responsible for change in a number of contexts $i = 1, \ldots, N$, and that the population dynamics of this parametric switch is controlled by Verhulst's differential equation

(2) $\mathrm{d}p / \mathrm{d}t = sp(1 - p)$,

Where $0 \leq p \leq 1$ is the frequency of the new parameter setting across the population, and s is a growth rate which controls the speed of the switch. Solving (2) yields the logistic equation

(3) $p(t) = \exp(k + st) / (1 + \exp(k + st))$

for $k = \log(p(0)) - \log(1 - p(0))$ which Kroch (1989) and others use to identify particular CREs in historical data.

In the spirit of the Constant Rate Hypothesis, we propose to derive the propagation curves of the individual contexts from this parametric curve p. Let p_i denote the frequency of the new variant in context i. To model contextual effects, we assume that

(4) $p_i = \pi_i \, p$,

where $0 \leq \pi_i \leq 1$ is a damping factor which measures how much the contextual effects of context i hinder expression of the new parameter value in that context. We let π_i evolve according to the generalized Verhulst equation

(5) $\mathrm{d}\pi_i / \mathrm{d}t = \sigma_i \, (\pi_i - B_i) \, (1 - \pi_i)$

with growth rate σ_i and lower asymptote B_i. This implies that π_i, as well as p, respects logistic growth, whereas their product (4) can sustain a more complicated dynamics.

Results. We find that, for most values of B_i and σ_i, the model generates the sort of behaviour depicted in Figure 1, i.e. the Constant Rate Effect as classically conceived. Furthermore, we show that for suitable values of B_i and σ_i the CRE can be broken, and the ensuing dynamics follows somewhat different lines (Figure 2). This, we believe, helps to explain data which have traditionally been problematic for the Constant Rate Hypothesis, such as some of the data for *do*-support (Ellegård 1953), where some of the context curves show a marked tapering before asymptoting towards the ultimate frequency of 1. We thus derive a model which predicts a slightly wider range of logical possibilities than the original CRE, while still remaining restrictive in what trajectories of change it predicts to be possible.

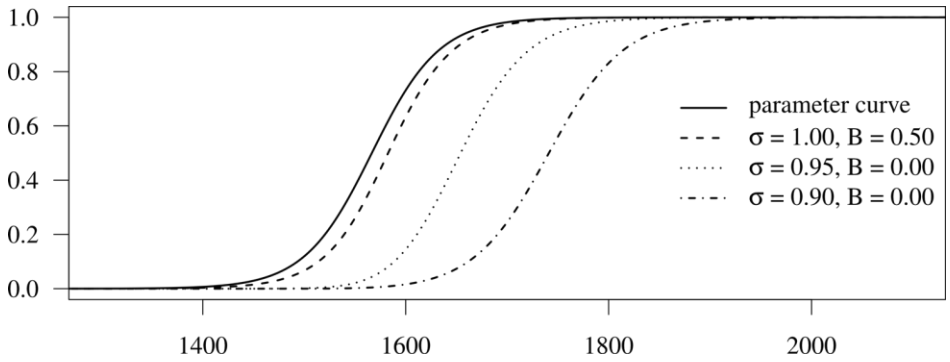

Figure 1: An imaginary parameter switch p (solid line) as per equation (2), with a number of context curves p_i (dashed and dotted) modelled using equations (4)–(5).

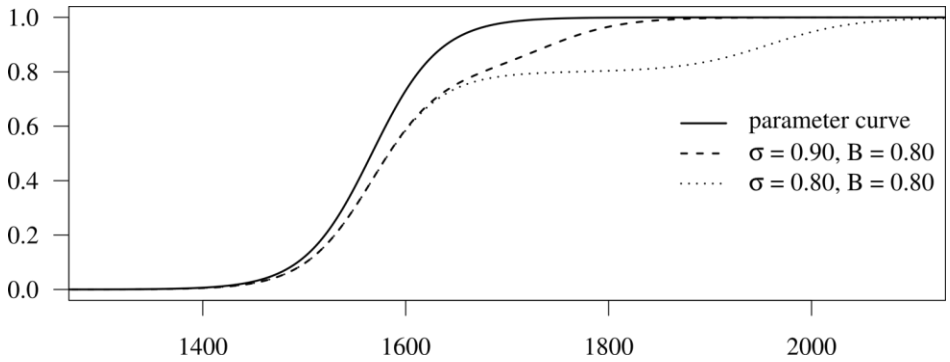

Figure 2: For a subset of the σ,B parameter space, the CRE is lost and a qualitatively different dynamics obtained.

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Parameters versus cartography in Benue-Kwa (Niger-Congo)*

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* Audio (*.mov*) and pitch tracks (*.jpg*) for all data are linked at [URL].

In Standard Yorùbá and also in Ògè of the adjacent Akókó cluster, *wh*-words and other narrowly focused items linearize at the left sentential edge.[31]

(1)a. Kíni Bọ́sẹ̀-ẹ́ rà l'ọ́jà ọba? Yorùbá
WH.thing B-SUFF buy at-market king
'What is it that Bọ́sẹ̀ bought in King's Market?'

b. Bàtà pupa ni Bọ́sẹ̀-ẹ́ rà l'ọ́jà ọba.
shoe red be B-SUFF buy at-market king
'What Bọ́sẹ̀ bought in King's Market is *red shoes*'

(2)a. Mii Bọ́sẹ̀ dà-á úrùn àájá ọba? Ògè
WH.thing B buy-SUFF at market king
'What is it that Bọ́sẹ̀ bought in King's Market?'

b. Íchọchọ bàtà ú-wọ̀n Bọ́sẹ̀ dà-á úrùn àájá ọba.
red shoe it-is B buy-SUFF at market king
'What Bọ́sẹ̀ bought in King's Market is *red shoes*'

In cartographic syntax, such displacements are taken to converge on a 'criterial' checking-theoretic position of the type Spec,CP or Spec,FocP (Rizzi 1997). For Yorùbá, however, Adéṣọlá (2005) applied tests of *Superiority* (Kuno & Robinson 1972, 474) and *Weak Crossover* (Wasow 1972, 137) yielding grammatical results as in (3). In Ògè the respective outcomes are shown in (4).

(3)a. Kíni tani-í rà l'ọ́jà ọba? Yorùbá
WH.thing WH.person-SUFF buy at-market king
'What is it that who bought in King's Market?' [* in English]

b. Tani ìyá rẹ̀-ẹ́ fẹ́.ràn?
WH.person mother 3S.GEN-SUFF like
'Who***i*** does {her/his}***j*** mother love?' [* in English if ***i***=***j***]

(4)a. *Mii nẹ̀ dà-á úrùn àájá ọba? Ògè
WH.thing WH.person buy-SUFF at market king

b. Nẹ̀ èyé và fẹ́hẹ̀n?
WH.person mother 3S.GEN like
'Who***i*** does {her/his}***j*** mother love?' [* in English if ***i***=***j***]

[31]. The historical proximity of Akókó to Yorùbá, recognized by Capo (1989), remains a topic of research.

Adéṣọlá gives a unified account of (3a) and (3b), holding "that the absence of superiority effects in Yorùbá is subsumed under the near absence of weak crossover effects" (2005, 22) and reducing this to a lexical parameter: the lack of interrogative +*wh* expressions (2005, 57, 239).[32] Overt A-bar movement in Yorùbá is thus illusory: hypothesized absence of +*wh* interrogatives compels Yorùbá to form content questions in a more complex structure coindexing a base-generated nonspecific antecedent with a nominalized clause headed by a null operator. (1a) is accordingly analyzed as (5), treating the *ni* of (1b) as an inverse copula (Yusuf 1990) excorporated from *wh*-indefinites like *kíni* 'what?' and *tani* 'who?' (cf. *kiní* 'something', *ẹni* 'some person').

(5) Kí***i*** ni [*Op****i*** Bọ́sẹ̀-ẹ́ rà ***t i*** l'ọja ọba]? Yorùbá (cf. Adéṣọlá 2005, 4)
WH.thing be B-SUFF buy at-market king
'What is it that Bọ́sẹ̀ bought in King's Market?'

Although (5) achieves impressive coverage, it faces two puzzles:

(i) Internal to Yorùbá: why don't children use a cartographic analysis of (1a) assigning a *wh*- feature to *kíni* 'what?'[33] In effect, what triggers the 'no *wh*- words' parameter?

(ii) External to Yorùbá: why do Ògè children exclude multiple *wh* (4a) despite allowing WCO (4b)? In other words, if Ògè uses the null operator *à la* Yorùbá (5), why are its consequences more limited?

Consider two theories:

(A) *macroparameter plus cartography*

Adéṣọlá's one-parameter account of Yorùbá questions can successfully exclude multiple *wh* in Ògè by stipulating that Ògè *wh*-words are base-generated in a high cartographic position, comparable to Ìgbo *kèdụ́* which Goldsmith (1981) assigns a dedicated templatic feature—root *E*.[34] As with any criterial analysis of displacement, however, one templatic feature per linearization must be posited. A second problem is that (5), which fixes *ni* in second position of the sentence, can't generalize to wide-scope, sentence-final *ni* (Awóyalé 1987, Adéṣọlá 1997) without either invoking *ad hoc* antisymmetric preposing of the whole sentential remnant, or else accepting accidental homophony for two synonymous *ni* items in complementary distribution.

(B) *interacting microparameters, no cartography*

If focus and questions share a veridical operator of *yes*/*no* polarity (Gleitman 1969, Cheng & Rooryck 2000), Yorùbá blocks this from scoping narrowly on arguments by an independent parameter: 'early' spellout of VP (Manfredi 2009). The *yes*/*no* operator can't attract a subconstituent of the VP phase, therefore (non-echoic) narrow foci must merge above VP (cf. Aboh 2007). The separate fact that Yorùbá 'high' argument focus lacks a pragmatic entailment of

[32]. Cf. Chierchia (1991), Hornstein (2001), Safir (2004).
[33]. Cf. Awóyalé (1985), Carstens (1985), Ṣónaìyà (1989), Bọ̀dé (2004).
[34]. Multiple fronted *wh* in Serbocroatian respects superiority (Bošković 1997).

exhaustive identification (Jones 2006) is inexpressible in cartography unless different 'flavors' of FocP can proliferate. Yorùbá escapes antisuperiority by incorporating veridical *ni* into the question word, yielding equidistance. Ògè question words lack a counterpart of Yorùbá *ni*, cf. (4a), but Ògè still escapes WCO as in Yorùbá: its question words can't merge before the polarity operator, forcing paratactic (5) as a last resort.

Both A and B predict nominalization of the focus remnant, as evidenced on mutiple independent grounds in Yorùbá (Awóbùlúyì 1978) and as audible in Ògè in the *nonfinite* suffix on the verb of the remnant clause cf. (2) above. Diachronically, B allows the trivial scenario—speculative on present knowledge—that Ògè question words lost their *ni*-type polarity feature by phonetic erosion.

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Variation and change in verb clusters: evidence from acquisition

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West Germanic verb clusters have been on the research agenda of many linguistic schools for a long time (cf. Seuren & Kempen 2003), and ever since Evers 1975 they were topic of discussion in the generative tradition. What exactly triggers this phenomenon of ‘verb raising’ is still unclear, as an excellent overview in Wurmbrand 2005 shows. One of the problems is that there is not only variation across but also within languages. Standard Dutch is a case in point, as the facts in (1) show. Both orders of the verbs are allowed in Dutch (the one in (1a) is called the 1-2, the ascending or the red order, the one in (1b) the 2-1, the descending or the green order).

(1)	a.	(…)	dat	ik	deze	Koekjes	**Wil**	**eten.**	(1-2)
		(…)	that	I	these	Cookies	Want	eat.INF	
	b.	(…)	dat	ik	deze	Koekjes	**Eten**	**wil.**	(2-1)
		(…)	that	I	these	Cookies	eat.INF	Want	

Both: ‘(…) that I want to eat these cookies.’

While German and Frisian, for instance, (mainly) show 2-1 orders, Dutch shows more variation and, as Coussé 2008 shows, changed from overwhelmingly 2-1 to much more 1-2 variation. Recent studies, based on corpora of both written and spoken Dutch, suggest that the 1-2 order is mainly a characteristic of more formal and the 2-1 order of informal registers (cf. De Sutter 2005, Stroop 2009).

Many (generative) accounts (starting with Evers 1975, with Haegeman & Van Riemsdijk 1986 as a key example) have, to different degrees, implicitly or explicitly abstracted away from this variation, suggesting that the formation of the cluster is a result of the syntax and (to some degree) the ordering within the cluster a result of other, perhaps even extra-grammatical (construction-specific) rules. This allows us to formulate relatively 'clean' parameters, but the consequence is of course that the parameters have less to say about the variation and change just mentioned, which were indeed more in focus of studies like Barbiers et al. 2008, Coussé et al 2008, De Sutter et al. 2005. Alongside this diachronic consequence, a gap between the surface facts and the actual parameter setting is also potentially problematic from an acquisition perspective. After all, the learner has to bridge this gap.

It is precisely for this reason that the present study focuses on the acquisition of verb clusters. Building further on Zuckerman 2001, we conducted a set of elicitation tasks in two different situations: monolingual children acquiring (Standard) Dutch as spoken in the Netherlands and bilingual children acquiring both Frisian and Dutch in the Dutch province of Fryslân. We tested 120 monolingual pre-schoolers and kindergartners (and 30 adult controls) in the first of these tasks. The results show that there is an acquisitional pathway in which children move through three stages: an 'OV stage', a '1-2 stage' and a 'mixed stage'. In the first stage, children do not recognize clusters yet. This happens in the 1-2 stage, when children first apply this analysis to clusters that are clearly verbal, i.e. clusters consisting of a modal verb and an infinitive. The less clear-cut candidates, the clusters containing an auxiliary and a participle, follow slightly later, taking the child's analysis from a construction-specific rule to a general one. Later, during the mixed stage, both orders are used and children's preferences increasingly become more adult-like. This suggests that in the Dutch situation the 1-2 orders in the input trigger verb raising, and that the 2-1 clusters come in relatively late and may hence be relatively vulnerable (contrary to earlier claims, and contrary to what could be expected on the basis of the reported preference for 2-1in informal Dutch).

The vulnerability of the 2-1 clusters is supported by the results of the nearly thirty bilingual Frisian-Dutch kindergartners we tested. We find the same results for their Dutch as for the monolingual Dutch children: an 'OV stage' is followed by a stage in which children have a clear preference for 1-2 order, before they fine-tune towards adult behavior. Even more telling are the results for Frisian acquired by the same bilingual children. Although Frisian is supposed to have strict 2-1 orders, it turns out that the bilingual children massively overgeneralize 1-2 orders and show, in fact, the same development for their Frisian as for their Dutch.

The results of our study suggest that variation is (at least partly) a consequence of a distinction between relatively early and late acquisition. Moreover, we conclude that a descending word order in a verb cluster is vulnerable if it is in competition with an ascending word order. We will suggest that there are learnability factors that prefer ascending orders. If the input is unambiguously descending, this will have no consequences (after all, descending orders are learnable), but if ascending orders reach the input (for instance as a consequence of language contact), the balance can be disturbed and a change towards ascending orders is likely, or is at best compensated by relatively late acquisition.

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Second Positions: Verb-Movement, Clitic-Movement and the Loss of Features

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This presentation has two parts. The first summarises the general analysis of second-position (P2) effects in syntax and the nature of the 'C-field' presented in Roberts (2012). There it was argued that P2 effects are largely attributable to the nature of C as a phase head (PH). P2 effects are very widespread cross-linguistically; languages showing such effects are found in all the European branches of Indo-European as well as in all the ancient Indo-European languages (cf. Fortson 2004:146-7). Such effects are also found in Basque (Laka 1990), Warlbiri (Hale

1983) and many other non-Indo-European languages (see the papers in Halpern & Zwicky 1996). Although one should be wary of drawing inferences about UG from the frequency with which a phenomenon is attested, the cross-linguistic evidence nonetheless suggests that there is something special about the second position. This paper proposes an account of that 'specialness', exploiting the essential idea that C is a phase head.

The central proposal of the first part of the paper develops ideas sketched in Roberts (2010:65ff.) and is as follows: (i) if, as argued extensively in Roberts (2010), narrow-syntactic head-movement exists and is a reflex of the Agree relation under certain highly specific conditions, and (ii) if, as proposed in Chomsky (2008), phase heads drive all narrow-syntactic operations in virtue of their uninterpretable formal features and their Edge Features (EF), then (iii) head-movement to PH-positions should exist and, most importantly, owing to the nature of head-movement as a purely Agree-based operation, this operation cannot satisfy PH's EF. In the case of C, this gives rise to verb- and clitic-second effects, where C's uninterpretable formal features attract the verb or clitic, with its EF attracting some XP to its edge, subject to a discourse interpretation. The discourse-relevant interpretations include topic, focus and Wh; in fact, where verb- and clitic-movement interact, we are led to propose a version of the 'extended left periphery' of the kind proposed in Rizzi (1997). In terms of Rizzi's approach, the head I am here identifying as C would be Fin. This interaction is illustrated with data from Old English and European Portuguese.

The second part of the paper turns to diachronic questions. In turn, it has two parts: one dealing with V2 and one with clitic-second. V2 appears to have been lost in different ways in different languages, although the underlying mechanism in each case is the introduction of systematic inheritance of C's probing features by T, causing V-movement to appear to "stop" at T (in unmarked main clauses). In Middle English, it was indirect consequence of one aspect of the change from OV to VO (Biberauer & Roberts 2008:98ff.). In Middle French (and probably elsewhere in North-Western Romance), it was the consequence of the development of a set of subject-clitic pronouns (Adams 1987, Clark & Roberts 1993). In other, fully null-subject, Romance varieties, it was the consequence of the relative freedom of movement into the left periphery, combined with the general availability of null subjects (Wolfe, in progress). In each case a radical reanalysis conspires to destabilise an otherwise fairly stable parameter setting. In a final section, I will give a precise characterisation of what makes V2 so stable, in terms of the notion of "mesoparameter" as developed in Biberauer & Roberts (2012).

Concerning the diachrony of second-position clitics, many authors have observed that clitics may be either "C-oriented" or "V-oriented" (although in the latter case, the term "I-oriented" or "T-oriented" is often used): see, among others, Benacchio & Renzi (1987), Cardinaletti & Starke (1999:196), Renzi (1989), Halpern (1995) and Rivero (1997). Following Roberts (2010), we take "V-/I-/T-orientation" to mean that the clitics target v. Suppose that clitics which target v are φ-elements (possibly subextracted from DP), while clitics which target C are D-elements. In order for Ds to target C, the system must have a "permeable" vP-edge, i.e. it must allow scrambling. So we can suppose that 2nd-position clitics develop from scrambled topic DPs; unstressed pronouns make particularly good topics (as old information) and so naturally tend to be more regularly scrambled. Hence the feature of C which attracts a topic becomes specialised for licensing a weak pronoun (see Richards 2004). If it is correct that C-

oriented clitics/weak pronouns are Ds while v-oriented clitics are φs, and, if feature-loss is a natural mechanism of diachronic change (see in particular Roberts & Roussou 2003, although in essence this is a traditional idea), then we might expect clitics to develop from D to φ. In that case, the approach proposed here predicts that clitics will shift their "orientation" from C to v, so that a diachronic shift from second-position to adverbal cliticisation should be observed, possibly in tandem with the loss of scrambling, i.e. a diachronic phenomenon of "rigidification of word order." This in fact has been observed for a range of languages: Romance (Wanner 1987, Salvi 1994), Greek (Horrocks 1997, Taylor 1990), and Macedonian-Bulgarian (Pancheva 2005).

In this way, we can account readily for the "grammaticalisation path" from scrambled DP to cliticised weak pronoun (Dmin/max) to clitic (φ). Further, if we assume that the φ-features characterising adverbal clitics are interpretable features, a further change from interpretable to uninterpretable features (also proposed by van Gelderen 2011) converts clitics into agreement markers, a diachronic shift from goal to probe. Cases of this involving a shift from subject clitic to agreement will be illustrated from Celtic and Northern Italian dialects. If probes differ from goals only in lacking values for their features, and Agree copies the goals values into the probe, then probes are inherently more impoverished than goals, and this change too reduces to a case of feature-simplification.

Generally, then the loss of second-position effects seems to involve feature loss/simplification. This raises the tricky question of how they originated. Clitics appear to have arisen from scrambling (see above); for V2 relevant evidence is very thin, but, following a suggestion by Newton (2006), we tentatively propose that it arose via remnant VP-fronting to the left periphery.

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Where are the Parameters in Problems of Projection?

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Chomsky's `Problems of Projections' (PoP, 2013; 2014) argues that symmetric structures cannot be labeled by the labeling algorithm and that this forces movement. This eliminates the need for EPP and ECP and parametric differences these involve. Apart from providing a new account for movement, Chomsky's latest work has problematized projection, specifiers, and labeling. Where earlier Phrase Structure Grammar and X'-bar theory take for granted that a phrase is headed, labeled, and expands to a maximal projection with a specifier, head, and complement, the current work only assumes a labeling algorithm that only allows sets like {X, YP} but not {XP, YP} and {X, Y} at the conceptual-intentional interface. Such an algorithm automatically rules out certain configurations, for instance, ones with a specifier. Chomsky (2013: 43) provides two solutions to labeling problems: "(A) modify SO so that there is only one visible head, or (B) X and Y are identical in a relevant respect, providing the same label, which can be taken as the label of the SO". For instance, a wh-phrase in the Spec of CP and the C' can merge if they share an "interrogative feature Q, a feature of C and the head" (2013: 45) of C'. The latter, feature-sharing solution, which also accounts for subjects in the Spec TP, reintroduces possible parametric differences between languages in terms of the features that can be shared. In this paper, I intend to look at some cases of feature-sharing and how these have changed.

If we look at language change, there is one persistent pattern that can be explained because it constitutes a resolution to a labeling paradox, namely that from specifier to head. I will provide four instances of this change: demonstratives reanalyzing as copula verbs, pronouns as agreement markers, negative adverbs as heads, and wh-phrases to complementizer heads. Like Chomsky (2013; 2014), I argue that features are crucial in the avoidance of asymmetrical structures but that they do not trigger movement. I will show how some diachronic changes can be explained as resolutions of the labeling paradox and themselves shed light on the precise nature of the labeling algorithm proposed in Chomsky (2013; 2014). A closer look at languages where fully phrasal subject pronouns are reanalyzed as heads gives us insight on which features can be successfully shared by D and T. A full DP in English has person and number, marks definiteness, and may contain a deverbal noun with thematic structure; first and second person pronouns, such as those in French, are pure person and number markers. These person and number features are indistinguishable from those of the agreeing T and therefore label the α

containing the DP and TP in [C [α DP TP]] correctly as T-headed. So, the French first person clitic is a head with first person singular features that are the same as the phi-features of T and therefore in accordance with the labelling algorithm. Now, we also have a reason for the reanalysis of pronouns to agreement markers. A fully phrasal pronoun (that can be coordinated and modified) cannot be seen as sharing the features of T but a head (that has to be adjacent to a verb) can be seen by the child acquiring French (or English) as similar in features to T.

A second case involves the well-known negative cycle and provides another view of features that help or not help the labeling paradox. In fact, it shows that negative features don't help resolve labelling paradoxes. For English, the changes are given in (1) (but see e.g. Willis, Lucas, and Breitbarth 2013 for others): (1a) shows the use of a negative determiner nan and the regular negative ne; (1b) shows a ne contracted with the verb into nes and a negative adverbial nawhit, a contracted form of the negative indefinite na wiht `no creature', (1c) shows the adverbial not by itself, and (1d) shows the cliticization of not onto the verb.

(1) a. ne fand þær nan þing buton ealde weallas & wilde wuda
not found there no thing except old walls and wild woods
'He found there nothing but old walls and wild woods'. (Peterb Chron, 963)

b. Nes þis meidennawhit heruore imenget in hire mod inwið.
not.was this maiden not herefore troubled in her mind within
'This maiden was not troubled in her mind because of this.' (Katerine 28: 21-22)

c. Yit it semeth that He wolde not leve thee thus lightly
'Yet it seems that he wanted not leave you thus lightly.' (Cloud of Unknowing, 241-42)

d. And to þis I cannot answere þee bot þus: 'I wote neuer.' 'And to this I can't answer you except thusly: I knew never.'(Cloud of Unknowing, 450-1)

The motivation for the negative cycle is often seen as pragmatically driven. I will argue that the syntactic labelling mechanism favors the negative as head, e.g. just the ne or –n't, but that the need to make the negative meaning obvious necessitates renewal in the form of an additional negative indefinite, which in turn is made into a head. At some point, the semantic negative features are reanalyzed as grammatical ones and the negative DP moves to the Specifier of the NegP resulting in a {XP, YP} structure. This should be salvageable under Chomsky's case (B) if the sharing of a negative feature sufficed. It must not since the negative ends up as a head. So negatives are an interesting case to look further.

The third case I investigate involves changes to wh-interrogatives. These are seen by Chomsky (2013) as sharing Q-features with C and therefore labelable. What is interesting is that there is evidence that whether is not reanalyzed as a head. Whether has never shown any inclination of becoming a head, as the impossibility of wh-extraction in (2) and the co-occurrence of it and a head in (3) show.

(2) *What did you wonder whether he'll do what?

(3) I don't know whether if you think there's going to be a nuclear fallout and ... (BNC F7L)

I plan to systematically look at all wh-elements where we have evidence of change to head (e.g. comparatives and relatives) and compare these with those that seem impervious to change. This should give us some sense for the features that are relevant in case (B).

The fourth case of specifier to head is the demonstrative to copula change. I use a PredP analysis of copula constructuctions, where originally the demonstrative occupies the specifier position. The demonstratives are reanalyzed to occupy the head of the PredP in accordance with principles seen in many other cycles and, since Moro (2000), Chomsky (2013; 2014), accountable in terms of labeling resolutions. The languages discussed here are Arabic, Egyptian, and certain creole languages.

This talk shows that the systematic language change from phrase to head is accounted for if such reanalyses resolve labeling paradoxes of the [XP YP] kind by eliminating one of the two XPs. The paper also looks at some cases that resist phrase to head reanalysis to show that here the XP and YP in fact share features so that they can be labelled and need no reanalysis. I also examine in further detail Chomsky's assumptions about the labelability of the XP in what used to be called the Spec TP and present that structure as another instance where a head is to be preferred. When the pronoun has features similar to those of T, there is again no labelling paradox, and change is towards that analysis. As in Chomsky (2013), many questions remain unresolved. The main one is what the nature of the features shared between the XP and YP is such that both are legible at the interface. Interrogative and phi-features can be shared but not negative ones.

The rise and fall of V2 in English as a case of parametric change

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I will explore the feasibility of casting the complex phenomenon of Verb Second in terms of one (macro-)parameter, and address the question how its loss in the history of English could be viewed as a case of parametric change.

I will first outline the complexity of V2 in early English, and then consider the similarities that might warrant an approach in terms of one single parameter. I will then go on to discuss the historical development of V2 in English.

V2 in early English is well-known to be of two types (e.g. van Kemenade 1987; Pintzuk 1999; van Kemenade 2012), with demonstrably different distributional properties.

Type 1 is categorical V2 and involves V to C movement in questions, negative-initial clauses, and clauses introduced by adverbs *þa* and *þonne* 'then'. It involves inversion of all types of subject, and V-movement is asymmetric, i.e. restricted to main clauses.

The second type of V2 involves other types of first constituent. Verb movement is to a lower position in the left periphery, where pronominal subjects precede it, and nominal subjects

typically follow it. V-movement in type 2 is not fully asymmetric. The following template shows this distribution:

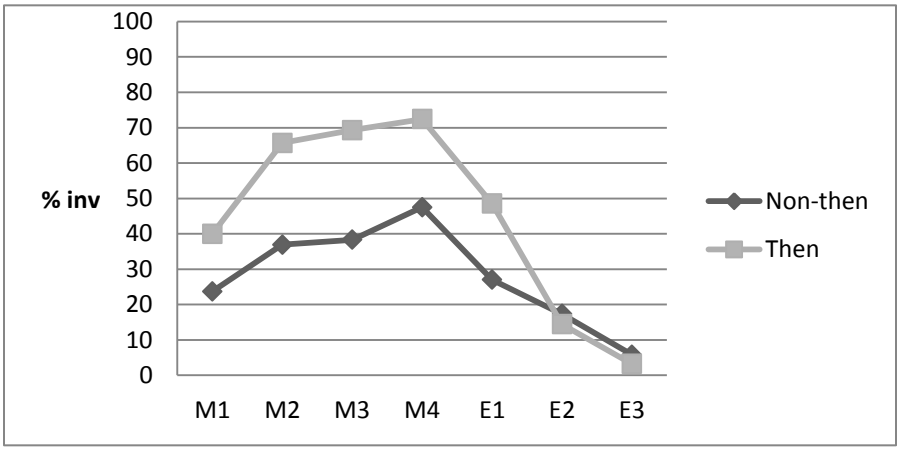
[CP XP *C* [FP Subject position 1 F [$_{TP}$ Subject position 2 T... [VP]]]]
Vf (1) Vf (2)

What the two types of V2 have in common is that initial non-subjects are in Spec,CP (van Kemenade 1997), and that the finite verb is in a position in the left periphery, in Old English quite dominantly in main clauses. It seems plausible that the trigger for V2 is in clause typing/illocution marking, and distinguishing main clauses from subclauses; the latter is a distinction that is still somewhat blurred in Old English, which is developing from a paratactic to a hypotactic clausal organization. The fact that there are two types of V2 will be argued to be an artefact of information structural distinctions. I hypothesize that in type 1 V2 the position of the finite verb serves to set off focus on the first constituent (a variation on Kiparsky 1995), visible particularly in questions and initial negatives (which, though the negation is proclitic on the finite verb, finds its origin in a much more prominent form of initial negation. The odd one out here seems to be the third type of constituent in type 1 V2, adverbs like *þa* and *þonne*. I will show that this very frequent adverb (type) is almost invariably part of a correlative pair, and thus seems to serve as an adverb resumptive to the foregrounded adverbial clause to which it forms the background:

(1) **þa** [ðæt] þa Wulfhere se cyning onget, & him gebodad wæs, þæt in þære mægðe Eastseaxna of dæle Cristes geleafa aidlad wære, **þa sende he** Gearaman þone biscop… (cobede,Bede_3:22.250.17.2554)
when that then Wulfhere the king heard, and him announced was, that in the province of-East Saxons' of part of Christ's faith emptied were, then sent he Jaruman the bishop,

The position of the finite verb in type 2 V2 serves to set off topic material (anaphoric subjects, pronominal objects) from less discourse-accessible material.

The development in Middle English shows up both convergence and divergence between the two types of V2, suggesting changes in the trigger. Type 1 V2 continues to be categorical in questions, and highly dominant in *then*-initial clauses (the Old English negative-initial version was lost for independent reasons), the introduction of type 1 V2 in focal negative-initial clauses (still around in present-day English *Never have I seen such a thing*) was introduced in the course of the Middle English period. Interestingly, however, Type 1 V2 also sees a considerable rise in constructions with (contrastive) object fronting (van Kemenade & Westergaard 2012), and, intriguingly, in contexts with various types of adverb (including ones that did not trigger V to C in Old English), though only in contexts with auxiliaries. (see the following graph from van Kemenade 2012).



Adverb-initial V2 clauses with auxiliary and pronominal subject
Legend
M1 = 1150-1250
M2 = 1250-1350
M3 = 1350-1420
M4 = 1420-1500
E1 = 1500-1570
E2 = 1570-1640
E3 = 1640-1710

I will show that, taken together, these facts all support the hypothesis that the trigger for type 1 V2 was extended in Middle English to include a wider range of focussed initial constituents, where these constituents include *wh*-constituents, emphatic initial negatives, adverbs that form part of a correlative pair, focussed adverbs (the latter two including both *then*-adverbs and other adverbs). The loss of type 1 V2 then consists in the loss of V2 with initial constituents other than *wh*- and focussed initial negatives.

Type 2 V2 converged in part with type 1 as in the previous paragraph, but was always more 'vulnerable' in the sense that it overlapped considerably with subject-initial clauses: pronominal subjects had always preceded the finite verb, as had many anaphoric nominal subjects. The main clause/subclause asymmetry with respect to type 2 V2, which had held largely in Old English, was lost over the Middle English period as the loss of OV word order progressed. Type 2 V2 was thus lost because its word order pattern converged with SVO word order. This shift is clearly visible over the late Middle English period, as I will show.

I conclude by observing that, even though the umbrella term V2 covers a range of different word orders, which overlap, converge and diverge over time, it makes sense to think of V2 in early English as a single, information structure-driven, parameter, consisting of finite verb placement in the left periphery of main clauses.

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Medieval Romance V2 and the Evolution of Romance Clausal Structure

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The intuition that the medieval Romance languages share the verb-second (V2) property with the Germanic languages is well established (Adams 1987, Roberts 1993; Vance 1997; Benincà 2004, 2006) though this view has recently been challenged (Kaiser 2002; Rinke & Elsig 2010; Sitaridou 2012). In order to bring a new perspective on the debate, this paper presents quantitative and qualitative data from a corpus study of six medieval Romance texts, drawing on data from Old Sardinian, Old Sicilian, Old Venetian, Old French, Old Occitan and Old Spanish. We suggest that different forms of V2 systems are instantiated in the early Romance texts and provide an account of how these systems could have evolved from Classical Latin onwards.

Pace Kaiser (2002), Rinke & Elsig (2010) and Sitaridou (2012), all the varieties under examination provide compelling evidence that finite verb movement targets a C-head. Evidence comes from a preverbal *vorfeld* not specialised for subjects, verb-subject inversion when a non-subject occurs in the left periphery, object topicalisation/focalisation without clitic resumption and the placement of Higher-Adverb-Space adverbials (Cinque 1999) after the finite verb. Linear V2 order is also the dominant order across all languages except Old Sardinian:

(1) Son cors ne poï je veoir..
his body NEG can.1SG I see.INF
'I cannot see his body' (Old French)

(2) et en faciendo estos seguramientos, ha él ya pensado…
And in making these assurances have.3SG he already think.PTCP
'And in making these assurances, he has already thought…' (Old Spanish)

These characteristics closely mirror those of the Germanic V2 languages (Holmberg & Platzack 1995; Vikner 1995) and provide evidence that a point of continuity across medieval Romance is the presence of a Phi-Probe on a C-head. We therefore conclude that finite verb movement

higher than the inflectional layer of the clause may represent the core of the '"Abstract Medieval Romance" syntax' posited by Benincà (2004).

Beyond this core point of continuity however, the languages under consideration vary in terms of two key underlying properties: (i) the head in the C-layer that bears both a Phi-Probe and +EDGE feature and thus constitutes the locus of the V2 property and (ii) whether a head in the C-layer bears an +EDGE feature at all.

Old Sicilian and Old Occitan share certain properties in common: they allow V1 in structures which appear to involve a null Shift Topic in the terms of Frascarelli & Hinterhölzl (2007), they show widespread attestation of orders where a preverbal Topic and Focus co-occur (4) and consequently show robust attestation of V4 orders (7.84% of OOcc. and 9.64% of OSic. matrix clauses).

(3) killi pirsuni pir la grandi pagura ki àppiru si partèru
those people for the great fear that have.3PL.PST SI leave.3PL.PST
'Those people, because of the great fear that they felt, left' (Old Sicilian)

It is suggested that here the locus of V2 is C_{Fin}, whereby both Topic and Focus projections in the CP are 'multiply accessible' in the terms of Benincà (2004, 2006) and null elements moving to the Topic layer can satisfy V2 through movement via SpecC_{Fin}P.

These characteristics differ markedly to the (later) Old Spanish, Old French and Old Venetian varieties instantiated in our texts. Here preverbal Topics and Foci do not co-occur at all, V4 accounts for less than 1% of matrix clauses and V3 can only co-occur with a semi-deictic adverbial expression, whose pragmatico-semantic characteristics suggest it is occupying a position very high in the C-layer within the Frame field (Giorgi 2010; Sigurdsson 2004, 2011). The nature of V1 in these varieties is also distinct, either failing to occur at all as in later Old French or being restricted to discourse-initial position with *verba dicendi*. We analyse this as a form of Narrative V1 which distances the speaker from the content of a recounted proposition and entails a different form of illocutionary force in the terms of Reis (2000). Formally this involves a null discourse operator (Zwart 1997:220), which we suggest occupies SpecC_{Force}P. Under the proposed analysis, in these languages the locus of V2 is C_{Force} (cf. Roberts 2012 for Germanic). The absence of V4 and Topic + Focus orders result from the high position of finite verb movement which allows only one constituent to occupy SpecC_{Force}P and optionally one further constituent to occupy C_{Frame}P. We suggest furthermore that the absence of V1 structures involving null topics results from the failure of null elements base-generated or moved to lower positions in the C-layer to move higher in the structure to satisfy V2. We suggest this is a result of Criterial Freezing which prevents these elements undergoing movement higher in the C-layer to satisfy V2 (Rizzi 2006).

Old Sardinian appears to show the characteristics associated with the other C_{Fin}V2 languages but differs in one crucial property: the presence of an +EDGE feature on a C-head (Wolfe 2014). It thus features 'half the V2 constraint' in the terms of Roberts (2005). This

manifests itself in an unmarked V1 word order (Lombardi 2007), which is distinct from the other Romance languages.

The new synchronic data enable a refined account of the evolution of Romance clausal structure. Classical Latin, as is well known, featured pragmatically conditioned verb-fronting, standardly associated with topic continuity, focus and different polarity values (Devine & Stephens 2006, Bauer 2009). Following Ledgeway (2012) we suggest that this was verb movement to the C-layer of the clause motivated by unvalued Information Structure-related features on the finite verb. The data from late Latin suggest a reanalysis to have taken place, whereby this pragmatically conditioned verb-fronting was reanalysed as unmarked verb movement to C_{Fin}, accompanied by optional topicalisation and focalisation (Salvi 2004; Clackson & Horrocks 2007; Ledgeway 2012). We suggest that this syntactic system is maintained in Old Sardinian, where the texts used in our study are earlier than for the other languages (11th-12th centuries). A further reanalysis appears to have taken place in the C_{Fin}-V2 languages, whereby the optional topicalisation or focalisation was reanalysed as the result of an +EDGE feature on C_{Fin}. Observations from 12th century French and Spanish texts, which are over 150 years older than those used in the corpus, suggest that earlier stages of these languages were C_{Fin}-V2 languages which underwent further changes to the C_{Force}-V2 systems instantiated in our texts.

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The diachrony of valence: changes in argument structure

Object omission in English: Going back to the roots

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It is an acknowledged fact that a relatively large number of English verbs can either bear a direct object or appear on their own, with no formal changes in the transition from transitive to intransitive uses and vice versa. Verbs of this kind, which have been addressed in the literature under various labels including dual-transitivity verbs (Huddleston and Pullum et al. 2002), ambitransitive verbs (Dixon and Aikhenvald 2000), and labile verbs (Letuchiy 2009), encompass verbs belonging to two clearly defined subsets (cf. Dixon 1994 Letuchiy 2010):

(a) Verbs for which a change in transitivity is paired with a rearrangement of the thematic roles originally assigned to the verbal arguments (e.g. They broke the window vs. The window broke, where the patient object of the transitive sentence becomes the subject in the intransitive counterpart).

(b) Verbs with which no such reorganization occurs, the agentive subject being retained in both variants and the direct object simply being omitted or dropped in intransitive uses of the verb (e.g. She is reading a book vs. She is reading).

The members of the first subgroup, chiefly represented by the so-called causative alternation and middle construction in English, seem to have attracted the greatest deal of attention in the literature, whereas the status and development of verbs belonging to the second subcategory have remained comparatively understudied. The aim of the present paper is to delve into the nature of this latter kind of transitivity shifts. For this purpose, I first introduce a taxonomy of type-b labile verbs which will duly reflect the heterogeneity of the members of the category. I take Fillmore's (1986) seminal article on object omission as a starting point to argue that it is essential to preserve the descriptive dichotomy between what he calls definite null complements (DNCs) and indefinite null complements (INCs), whereby genuine instances of object drop (i.e. INCs) are set apart from cases in which the elided object can be retrieved from the surrounding context (i.e. DNCs). Similarly, I subscribe Fillmore's idea that INCs comprise "two distinguishable phenomena, one involving a semantic object of considerable generality, the other requiring the specification of various degrees of semantic specialization" (Fillmore 1986: 96). This opposition is exemplified respectively by the objectless uses of verbs such as eat in He has not eaten since the surgery, where eat simply refers to the physical activity of consuming any kind of food, and drink in I have tried to stop drinking, where drink denotes the ingestion of alcoholic substances in particular. Contrary to what happens with indefinite omission, Fillmore treats verbs with definite null complementation as a rather monolithic group, and therefore decides not to make any further distinctions within this subcategory. In my opinion, however,

structures such as She entered the room and I noticed and I won't say a word, I promise, should not be treated as instances of the same phenomenon, inasmuch as the latter type displays various features indicative of 'thetical' status (cf. Kaltenböck et al. 2011) (e.g. prosodic, syntactic, and semantic independence and morphological fixation) which are absent from the former.

A question that naturally arises from the previous discussion is what kind of verbs are allowed with each specific pattern of null complementation and which are the reasons underlying the eligibility of those verbs as members of one or the other subset. In this context, the second aim of this paper is to explore the historical roots of the selected objectless variants with a view to ascertaining the principles governing the different null complementation strategies in English. With this purpose in mind, I will chart the diachronic evolution of one verb prototypically used in each of the null complementation schemes described in the preceding paragraph (namely, eat, drink, notice and promise), as the detailed analysis of the contexts in which the intransitive variant emerged and spread over time will certainly contribute to obtain a more precise picture of the factors that might have played a role in the rise of the pattern. To this end, data are primarily drawn from the Helsinki Corpus of English Texts (HC) and A Representative Corpus of Historical English Registers (ARCHER), complemented with data from the Penn Corpora of Historical English.

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Constructionalisation, clause merger and the evolution of the Iwaidjan reciprocal construction

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Iwaidja, Mawng and Amurdak, three languages of the Iwaidjan family (non-Pama-Nyungan, Northern Australia (Evans 2000) have a cross-linguistically unusual construction for encoding reciprocity: to express 'they two saw each other', one says the equivalent of 'he-her-saw and she.in.turn'. An Iwaidja example is (1) and a Mawng example (Singer 2011) is (2):

(1) kawun lda jamin
K-nga-wu-n lda jamin.
3sgO-3sg.femA-hit-NPst CONJ 3sgCONTR
'They (2, m & f) hit each other.'
Literally: 'she hit him, and HE...'

(2) kinga-wu-n la yamin.
PR.3GEN/3MA-hit-NP CONJ 3MA.CONTR
'They (2, m & f) hit each other.'
Literally: 'she hit him, and HE...'

Historically, this appears to derive from a truncated biclausal construction from which the second verb has been ellipsed – something like 'he-her-saw and she.in.turn she-him-saw'.

Synchronically, however, there is clear evidence that the construction has been reanalysed as a single clause.

Firstly, other material from the first clause can be placed outside the 'in turn' pronoun. This includes theme objects of ditransitives, or other arguments of three-place constructions: 'he-her-gave and she.in.turn food' for 'they gave each other food', and 'he-her-looked.at and she.in.turn lice' for 'they searched each other for lice'.

Secondly, the 'in turn' pronoun, for some subject/object combinations, does not always differ from the subject of the first clause, showing that a single constructional clause-level template is determining the choice of bound and free pronouns.

In this paper we reconstruct the historical changes which led to this highly unusual case of clausal merger, drawing on comparative morphosyntactic evidence but also on evidence from prosody which shows that particular phonological reductions of the 'and PRONOUN.IN.TURN' occur in the reciprocal construction but not in true contrastive subject uses.

Apart from its interest for the diachronic typology of reciprocal constructions, this construction is a dramatic illustration of how far 'constructionalisation' can proceed, in producing clause level assemblages whose initial appearance of compositionality is at odds with the facts of semantic interpretation: in the case of Iwaidja and Mawng reciprocals, we will argue, it is the whole constructional gestalt to which projections of argument roles and semantic interpretation as reciprocals must be attached.

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When the minstrels rustled into the room, she whispered disbelief: On the development of two valency-increasing constructions in the history of English

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Studies on English verb valency (e.g. Visser 1963-1973, van Gelderen 2011: 116, among others) have often drawn attention to the numerous diachronic changes undergone by English in that area of grammar. The drastic simplification of most inflectional categories and consequent morphological opacity, coupled with structural processes such as the loss of the V2-rule in Middle English and the changes it brought for the information structure of the clause, lie behind developments such as the decline of the Old English impersonal construction (Möhlig-Falke 2012), or the emergence of an increasing number of labile verbs capable of being employed in valency alternations (i.e. transitively and intransitively) with no formal change.

In this paper, we will examine two kinds of valency-increasing constructions in the history of English. On the one hand, occurrences of intransitive verbs of manner of speaking (grunt, sigh, shout, whisper) and verbs of gestures and signs (clap, nod, smile, wave) governing a nominal object, in a pattern that, following its initial description in Levin (1993), has usually come to be known as Reaction Object Construction (ROC). Witness (1)-(2):

(1) 1591 R. Greene Second Pt. Conny-catching sig, A3: ... and that the horse-stealer clap him good lucke. (OED clap v.1 II.5.d).

(2) 1870 CLMET-EV Meredith, The Adventures of Harry Richmond: ... my old love for him whispered disbelief in his having disgraced me.

ROCs can generally be paraphrased as 'to express N by V-ing'; i.e., in the above examples, 'to express/wish good luck by clapping', 'to express disbelief by whispering', etc. They seem to emerge in English in the late 15th century (Bouso 2014), but only grow in frequency from Modern English onwards, their expansion thus roughly coinciding with that of other kinds of unsubcategorized objects, in particular so-called 'aspectual' cognate objects (Lavidas 2013: 314-315, Lavidas 2014), as in (3):

(3) 1470-1485 Malory, Morte d'Arthur (Sommer) III, v: The herte lepte a grete lepe. (Visser 1963-1973: §424.b)

These 'augmentation' processes in intransitives take place alongside changes affecting another common intransitive pattern, namely the construction first discussed by Goldberg (1995) under the label of 'Intransitive Motion construction' (IMC), as illustrated in (4):

(4) OE Homilies of Aelfric 5 214: þæt wif ... efste to ðære byrig and bodade ymbe Crist (DOE ef(e)stan A.1.a) 'the woman … hurried to the city and preached about Christ'

In the variant of the IMC most commonly attested since Old English times (Fanego 2012, Huber 2014), the construction conforms to a schema of the form [SUBJ V DIR], where V is a verb of manner of motion such as OE efestan 'hurry', and DIR a directional particle or phrase, i.e., a 'satellite', in the terminology of Talmy (1985). The pattern typologically distinguishes satellite-framed languages such as English, German, Swedish, Russian or Chinese, which characteristically express motion events by encoding manner in the main verb and path in a satellite, from verb-framed languages such as Spanish, French, Turkish and Semitic, which characteristically express path of motion in the verb root and leave the expression of manner to an independent adverbial constituent (cf. Spanish: la mujer marchó hacia la ciudad apresuradamente 'the woman hurried to the city'). That the IMC is a construction with its own non-compositional meaning is apparent from the fact that a variety of non-motion verbs, including sound emission verbs such as rumble (originally, 'to produce a rumbling sound by agitating or moving something') or rustle (originally, 'to make a soft, muffled crackling sound'), can also be accommodated into the construction, their meanings then conforming to the meaning of the structure in which they are embedded through the principle of 'coercion' (Goldberg 1995: 159, Michaelis 2004: 25, Croft 2012: 84-87):

(5) 1642 J. Taylor St. Hillaries Teares 5: The Coaches which had wont to rumble up and downe. (OED rumble v.2 4.a. 'To move or travel with a rumbling sound')

(6) 1594 J. Lyly Mother Bombie v. iii. sig. H3: These minstrelles... rustle into euery place. (OED rustle v. 2.a. 'To move with a rustling sound')

In the above examples, the morphosyntactic context effectively extends the argument structure of the verbs in question into a directional meaning and adds, furthermore, an implication of concurrent result; in other words, "it is the motion that brings about the sound emission" (Croft 2012: 302): the rumbling is the result of the coaches' motion up and down, the rustling is a result of the minstrels' motion into every place, and so on.

In our presentation, we will explore the interconnections between the several valency-increasing constructions above mentioned, as also the relationship between the emergence, at some point during the late Middle English period, of the variant of the IMC illustrated in (5)-(6) and developments taking place in the system of English resultative constructions generally, most especially in the way-construction (e.g. the steamer plashed its way forward; cf. Broccias 2008, Mondorf 2011, Traugott & Trousdale 2013: 76 ff).

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Valence-reduction and the expression of speaker affectedness in Chinese

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This paper examines the relationship between the valence-reduction of transfer verbs and the expression of speaker affectedness in Chinese. More specifically, we examine how causative uses of transfer verbs meaning 'give', 'take' and 'provide' are extended to passive and unaccusative uses, the latter attested in Mandarin and Southern Min dialects. As seen in (1), these transfer verbs can be used as 3-place (3-P) predicates with a lexical causative reading meaning 'to cause someone to possess something (e.g. a chance or opportunity)'. It can also be used as a syntactic causative meaning 'to cause someone to do something', as in (2). As discussed in previous literature (e.g. Nedjalkov 1993; Knott 1995; Yap & Iwasaki 2002), in reflexive contexts, syntactic causative constructions such as (3a) can develop into passive constructions such as (3b). That is, a reflexive causative construction meaning 'some entity$_i$ letting another entity$_k$ to do something to itself$_i$' can be reinterpreted as a reflexive passive construction meaning 'some entity$_i$ (inadvertently) allowing another entity to act upon it'. With 'give' constructions, a passive reading can emerge in the sense of 'some entity$_i$ being acted upon by another entity$_k$' as in (4). As a result of agent defocusing in this causative-to-passive reanalysis (see Shibatani 1985), we see a reduction in valence from 3-place to 2-place predicates (i.e. 3-P > 2-P). As noted in Matthews, Xu & Yip (2005), with some of the transfer verbs, such as 'give' but not 'take' nor 'provide', valence reduction is extended further to 1-place (1-P) predicate constructions involving unaccusative predicates as in (5) and (6). These unaccusative intransitive contexts typically involve adversity readings that highlight the speaker's subjective stance, with the erstwhile transfer verb (e.g. 'give') being reanalyzed as a case marker for an affected entity (what Huang 2013 refers to as 'a phantom affectee'), which by default includes the speaker (see also Lin 2011; Chen & Yap, under review). Using diachronic data from the Academic Sinica Tagged Corpus of Old Chinese and the Corpus of Classical Chinese, as well as Southern Min songbooks from the Qing dynasty (19th century), and using synchronic data from fieldwork on contemporary Chaozhou (a dialect of Southern Min), we first trace the phenomenon of valence reduction in Chinese involving transfer verbs 'give', 'take' and 'provide', and we then investigate how the expression of speaker affectedness emerges from the process of valence reduction. In particular, expanding on Huang (2013), we will show how retention and reanalysis of these transfer verbs facilitates the emergence of pragmatic markers of speaker stance.

Examples from Chaozhou (Jieyang) variety:

(1) *i k'eʔ ua kai kihue*

3SG give 1SG CL chance
'She gave me a chance.'

(2) *i k'eʔ ua k'ɯ*
3SG give 1SG go
'She let (< 'give') me go.'
Lit. 'She gave me (the opportunity) to go.'

(3) a. *i k'eʔ hou aʔ*
3SG give rain water
'She let the rain fall on her.'
Lit. 'She let (< 'give') the rain water her.'

b. *i k'eʔ hou aʔ tio*
3SG give rain water RVC
'She was drenched by the rain.'

(4) *i k'eʔ tsia kau ka tio*
3SG give CL dog bite RVC
'She was bitten by the dog.'
Lit. 'She let (< 'unintentionally give') the dog bite (her).'

(5) *kai ts'ak k'eʔ i tsau k'ɯ*
CL thief give 3SG go RVC
'Alas, the thief has escaped.'
(Intended meaning: 'Someone inadvertently let the thief escape and the speaker and possibly others as well are affected by this.')

(6) *tsaŋ hue k'eʔ i si k'ɯ*
CL flower give 3SG die RVC
'Alas, the flower has withered and died.'
(Intended meaning: 'Someone inadvertently let the plant die and the speaker is affected by this.')

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Change-of-state and psych verb anticausatives in Anglo-Norman: contact influence on Middle English?

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This paper considers the language contact situation in the Middle English period and examines whether developments in French argument structure influenced the development of English psych verbs. Object experiencer verbs in Modern English do not normally undergo the causative/inchoative alternation, e.g.:

(1)a. This news dismayed/frightened/amused/embarrassed Cameron.

(1)b. *Cameron dismayed/frightened/amused/embarrassed at this news.

Despite the high productivity of the causative/inchoative alternation with English change of state/position verbs (Levin 1993), psych verbs resist it, though there seems no crosslinguistically valid reason why this should be so. In OE certain Object Experiencer verbs were labile (van Gelderen 2012), e.g. *sceamian* `cause/feel shame', *tweonian* `cause/feel doubt at', and in early Old French this was quite generally the case, e.g.:

(2)a. De cunrei nen **esmaez** Que vus ici asez n'en aiez. S. Brend. MUP 365
'Of food do not (be) dismay(ed) that you don't have enough here'

(2)b. Auques les ont hui essaiez, sevent ques a mout **esmaiez** la perte c' ont hui receü. Rom. de Thèbes p. 162
'(They) tested them today somewhat, and know that the loss they received today has dismayed them greatly'

(3)a. De la voiz del tuen tuneire **espowenterunt**. Oxf Ps. 1.103.8;
'By the voice of your thunder (they) will (be) frighten(ed)'

(3)b. É Deu chalt pas sur les Phistiens tuná é forment les **espoentá**. Quatre Livres, p. 15
'And God quickly thundered over the Philistines and greatly frightened them'

By the 13th c., this construction had been largely replaced by the reflexive anticausative construction (Hatcher 1942, Heidinger 2010), e.g.:

(4) Del laid tens ne de la turmente/Un sul petit ne s'**espoente**. S. Modw. 6052

'(He) is not one single bit afraid of of the ugly weather or the storm'

Verbs of change of state and change of position nevertheless remained labile into the late 13th and 14th c. A dissociation thus arose in later Old French between Object Experiencer verbs and these other two classes.

Following the 11th century Norman Conquest, Old French is known to have exerted a powerful lexical influence on Middle English lexis (DeKeyser 1986). It is proposed that such contact influence involved borrowing not only forms and their semantic denotation, but also the borrowed verb's argument structure (Levin & Rappaport-Hovav 1995, 2005). By the period of massive lexical borrowing from French, the 13th and earlier 14th centuries, it had already adopted the dissociation between the labile change of state/position classes, and the non-labile Object Experiencer class. This timing effect offers an explanation of why English shows the same split. The case is substantiated by an analysis of a-structure data using the Anglo-Norman Hub corpus of French texts written in England. Whether change should be envisaged as having operated itemwise or at verb class level is discussed.

The diachronic development of transitive impersonal constructions in Icelandic, Irish, Polish and Ukrainian

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Although the *passive* is one of the most scrutinized constructions across varying theoretical and typological perspectives, some subtypes consistently pose categorization problems, both for linguists and for speakers acquiring their mother tongue. Based on historical and synchronic data from Icelandic, Irish, Polish and Ukrainian, we argue that so-called "impersonal passives" are in principle syntactically ambiguous, and can be interpreted either as canonical passives with an "empty" [*e*] subject, or as impersonal actives with a null unspecified human [pro_{arb}] subject (see also Haspelmath 1990, who observes that "...intransitive desubjectives are indistinguishable from passives of intransitive verbs").

Transitive "non-promotional" passives are a key example. The syntactic properties of the Ukrainian *–no/to* construction (cf. Maling & Sigurjónsdóttir 2002) show that even constructions governing accusative objects may be categorized as impersonal passives, contra Haspelmath (1990:35) and Blevins (2003), *inter alia*. In this paper, we will discuss the on-going development of a new Transitive Impersonal construction in Icelandic (Maling & Sigurjónsdóttir 2002), and compare the syntactic properties of the Icelandic construction with the diachronic development in the Irish autonomous form and the Polish *–no/to* construction where the reanalysis has been completed. The innovative Icelandic construction takes the form in (2); compare the standard passive illustrated in (1):

(1) *Að lokum var* ***stelpan*** *valin í aðalhlutverkið.* **(Standard passive)**
at end was girl.the-NOM chosen-FEM in lead.role.the
(2) *Að lokum var valið* ***stelpuna*** *í aðalhlutverkið.* **(Transitive Impersonal)**
at end was chosen-NEUT girl.the-ACC in lead.role.the

Note that the Transitive Impersonal in (2) could be translated in either of two ways: (a) as a passive, or (b) as an active with an unspecified human (hence "impersonal") subject.

a. In the end, the girl was chosen for the lead role.
b. In the end, they chose the girl for the lead role.

The proper analysis of the new Transitive Impersonal construction has been the subject of lively debate in recent years, but there is no disagreement that a major syntactic innovation is taking place, and that the construction is rapidly gaining ground. This system-internal change is not the result of borrowing, nor is it the result of phonological change or morphological weakening.

Maling & Sigurjónsdóttir argue that the new Transitive Impersonal in Icelandic is embarking on the same path towards a syntactically active construction that has been completed for the Irish autonomous form (McCloskey 2007, Graver 2011) and the Polish *–no/to* construction (Kibort 2001, 2004) but unlike the Ukrainian *–no/to* construction (Maling & Sigurjónsdóttir 2002; Maling 1993, 2006; *inter alia*). The contrasting syntactic behaviour of the *–no/to* construction in Polish vs. Ukrainian indicates that the readily observable data, e.g. accusative case, under-determines the analysis; it is only by looking at a wider range of syntactic properties (e.g. unaccusative verbs, agentive *by*-phrases, reflexives and other bound anaphors, and subject-oriented adjuncts) that we can determine whether the verb's agent argument is mapped onto a thematic subject position, or onto an implicit "demoted" subject oblique or adjunct. We agree with Haspelmath that "[t]he difference between passive and desubjective is of a syntactic rather than a semantic nature..." (Haspelmath 1990:58).

The historical dimension is significant. As the Icelandic, the Irish and the Polish cases tell us, the syntactic behavior of such constructions can change over time, and the transition from impersonal passive to impersonal active can take many centuries to complete. In Polish, accusative case in the *–no/to* construction is already occurring productively by the 15th century (Lavine 2000, Meyer 2010). For the Irish autonomous form, accusative appears on verbal objects as early as the 10th C; unaccusative verbs occur from the earliest written periods, but agentive *by*-phrases are still found as late as the 17th-18th C. Because this construction is genuinely syntactically underdetermined (Maling & O'Connor 2015), the two interpretations, together with their alternative possible syntactic analyses, can co-exist for a long time.

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From intransitives to transitives and causatives: Changing content accusatives to direct objects (Evidence from ancient Indo-European languages)

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The present paper focuses on a diachronic phenomenon common for a number of ancient Indo-European languages that attest intransitive constructions with accusative noun phrases traditionally called in Indo-European scholarship content accusative constructions. That is, a

number of fundamentally intransitive verbs may be construed either (i) with etymological accusatives, as in the case of Sanskrit puSTím puSyati lit. 'he prospers prosperity' (i.e. 'he prospers'), or (ii) with non-etymological content accusatives (Inhaltsakkusativ), referring to some aspects, parameters or scope of prosperity, as in śravas puSyati 's/he prospers (in) glory' (i.e. s/he is glorious').

I will argue that some constructions of this type can readily be reanalyzed as transitive-causative constructions with direct objects, according to the scenario instantiated by examples such as:

bhūma	víśvam	puSyati
earth:NOM	everything:ACC	prospers

'The earth prospers in everything [which exists on it].' (content accusative constructions) →
'The earth makes everything [which exists on it] prosper.' (transitive-causative construction)

The original content accusative group (in our example, víśvam 'everything') is reassessed in this case as referring to the causee of the process, which results in a crucial change of the valency pattern and syntactic features of the base verb. In particular, the emergence of a transitive-causative pattern implies the rise of the labile syntax for verbs such as puSyati 'prospers, makes prosper'.

This diachronic process is common for many languages with content accusative patterns, such as Ancient Greek or Vedic Sanskrit. In Greek, this phenomenon may contribute to the expansion of the labile syntactic type. However, even in Vedic, where we observe general decline of the labile type, such developments may result in sporadic emergence of new labile verbs.

The status of this process within the system of diachronic features of the language is arguably dependent on the fundamental diachronic type of the language in question (see e.g. Kulikov 2009).

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Argument Structure in Flux in the history of English

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The history of English shows an increase in transitivity through a decrease in intransitive verbs and an increase in labile verbs. Typologically, this change is a result of the fact that certain parts of the English language have become more analytic, e.g. those marking argument structure. The loss of transitivizing/causativizing prefixes, the increased use of light verbs, such as *make, do, put*, and *get*, and particles, the loss of case, and the increase in articles are the visible result.

In the first part of this talk, I chronicle some of the morphological changes that affect the argument structure in English. When we talk about transitivity, the entire event is relevant. Arguments that are definite and aspect that is perfective add to the transitivity of an event. Marking definites and aspect has changed dramatically in the history of English. Where Old English has specialized case and some use of demonstratives to mark definiteness and verbal prefixes, as in (1), and inflections to mark aspect, Modern English uses articles for definiteness and particles and auxiliaries for aspect.

(1) *ða ferdon þa Pihtas & **ge**ferdon þis land norþanweard*
`Then went the Picts and conquered the land northward.' (Peterborough Chronicle Preface)

Figure 1 shows the loss of causitivizing *–i* and transitivizing/perfectivizing *ge-*.

1	Old English	V intransitive		+ *-i*	>	V causative
		↓	↓	0		↓
	Middle	↓ V intransitive		=		V causative
2	Old English	V intransitive		+ *ge-*	>	V transitive
		↓	↓	0		↓
	Middle	↓ V intransitive		=		V transitive

Figure 1: Increases in lability

The second part of this talk is to examine the ramifications of the increase in transitivity for theta-marking. In the next few months I plan to work on this a lot more. I will provide data, based on Visser (1963), to show the dramatic loss of intransitive verbs and will be exploring changes from unaccusative to copula (loss of Theme theta-role) and changes in unergatives (addition of reflexive arguments and cognate objects, i.e.addition of Theme).

There are also verbs that rearrange their arguments, for instance, Experiencers that function as objects can be reanalyzed as grammatical subjects (van Gelderen to appear). For instance, the verb *fear* shows such a change because it had a meaning of 'frighten' in Old English. New experiencer objects arise through a reinterpretation of a Theme as an Experiencer. This happened with *stun, worry*, and *grieve*, which initially had an Agent and Theme that were reanalyzed as Causer and Experiencer. These rearrangements are sometimes the result of changes elsewhere in the grammar (the loss of the causative morpheme) but sometimes, I argue, reanalyses in order to adhere to an animacy hierarchy. One of my hypotheses is that Themes are very stable but that other theta-roles are not.

In short, I look at morphological changes relevant to marking the argument structure in the history of English and then at possible ramifications of this for thematic roles. The aim is to get to a fuller understanding of differences between the various theta-roles and their structural representation.

DV 14 The diachrony of valence: changes in argument structure

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Traditionally, (pro)nominal case morphology is thought to be intrinsically linked to syn¬tactic relations and linearization, cf. (structural vs. lexical) case theory in GG, since Rouveret & Vergnaud (1980). Somewhat differently, semantic valence (Fillmore 1968) argues and classifies more strictly based on individual verb valence. The two traditions are related by their use of the syntagmatic ('horizontal') clause-organizing criterion. How¬ever, deeper functional links between homonymous case suffixes come to the fore and become relevant when one considers the 'vertical' paradigmatic view of valence relations, i.e. a case form can be replaced with its syntactic function remaining identical. Based on samples of morphological case paradigms from German, Dutch, English, Latin, and Russian, the significance of Carstairs-McCarthy's (2010) Synonymy Avoidance Hypothesis/SAH is evaluated, in the light of generalizations achieved by researchers in Natural Morphology (Wurzel, Mayerthaler, Dressler, Bitt¬ner A., Bittner D., Bierwisch, Jakobson, among others).

The aim of this investigation is to identify potential deeper characteristics of the individual case forms within these paradigms and across the entire system of case paradigms. The question is to what extent such case paradigms could have evolved in their own right following the SAH or whether they should preferably be seen as in effect identifying syntactic relations, though certainly not doing so uniquely. In this connection, the value of the SAH will be addressed, as against the traditional approach in this field, which seeks to identify the deeper functions of homonymous case forms. The tradtional approach is here labelled the functional identity hypothesis/FIH, e.g., singular genitive (partitive)/ plural nominative, as with Latin domini-puellae-domus-ordini/es for the function of quantification across all three genders; see Leiss (1997) for considerable extensions of the same methodological approach.

This leads to two noteworthy conclusions: (1) FIH has far more generalizing force in that it relates functions across paradigms and even different word classes (as, e.g., meiner-deiner-seiner both for personal pronominal genitive and possessive pronoun nominative (masculine)); (2) FIH tackles questions of morpheme homonymy to SAH in that it tries to account for what is functionally common to homonyms in different classifying contexts; pending closer inspection and comparison, it seems that FIH includes SAH in a whole-part relation: SAH is a synonymy-avoiding theory, while FIH unearths hidden functional commonalities between homonymous forms in different paradigmatic and syntagmatic contexts. Whether or not this is the case, the two approaches to morpheme discrimination and classification complement each other in interesting ways worth highlighting. Clearly, individual languages pursue separate paths in this respect, but

SAH and FIH apply quite generally in their own right. The relative explanatory value of the two mutually exclusive hypotheses, SAH vs.FIH, will be compared and evaluated, with the eventual expectation of being able to derive conclusions about the status of case morphology in the evolution of syntax and language in general before coding full (truth-conditionally valued) sentences as well as before (only oral coding) and after the advent of literacy (written code).

One crucial question arising under the paradigmatic view is whether there is any relation between the functions uniting different paradigmatic case forms and the fundamental source of valence, i.e. semantic (theta) roles. Do case features such as quantity (common to partitive genitive singular and nominative plural, e.g. in Latin) have any bearing on traditional verbal theta qualities? Or is there a reason, under this view, for revising and assessing more deeply the classical (e.g. Dowty's) theta properties and their discrete features against Jakobson's composite case features? Relevant examples are the features [±human] and [±animate], which play a role in both theta theory and FIH.

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On argument structure change in Middle English ditransitives

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The English language, as is commonly acknowledged, saw a move from more synthetic to analytic means of expression in its history. This development is typically linked to the general decay of morphological case marking at the transition from Old to Middle English (Allen 1995; Lundskær-Nielsen 1993; Mitchell 1985; Visser [1984]). It is also reflected in changes in the argument structure of ditransitive verbs such as *giving*: from late Old English/early Middle English onwards, the indirect object (denoting the recipient or affectee of an action) was increasingly frequently realised syntactically as a PP (1) instead of an NP (2; double object construction/DOC). The availability of two different patterns for expressing ditransitivity is well-known from Present-Day English as the 'dative alternation' (3), and the factors influencing the choice of either one or the other variant have been subject to much discussion (cf. e.g. Bresnan et al. 2007).

(1) *They gaff the godis [...]* ***to theire knyghtes*** 'They gave the goods to their knights' (a1470; Malory's Morte Darthur)
(2) *Who shal ȝyf* ***me*** *þe ȝyftes of þe holi gost*? 'Who shall give me the gifts of the holy ghost?' (c1350; Earliest Prose Psalter)
(3) *Mary gave* ***John*** *an apple* / *Mary gave an apple* ***to John***

The present paper relates the emergence of this structural variation to another phenomenon observable during the period of Middle English, namely a significant reduction of the range of verb classes associated with the DOC. Certain verb classes, for example verbs of

dispossession (4) thus became markedly less frequent in this construction over time (Barðdal 2007; Barðdal, Kristoffersen & Sveen 2011; Colleman & De Clerck 2011; Rohdenburg 2007).

(4) *For dronkenesse bireveth **hym** the discrecioun of his wit* '*for drunkenness robs him the discretion of his wit' (c1390; Chaucer Parson's Tale)

Based on a quantitative study of all instances of ditransitive verbs in either the DOC or any of its prepositional paraphrases (crucially involving not only *to* but other prepositions such as *from*, *of* or *on* etc. as well) in the *Penn-Helsinki Parsed Corpus of Middle English* (PPCME2), the following scenario is proposed:

At the beginning of the Middle English period, the DOC encodes a rather wide range of meaning relations (e.g. successful transfer, but also dispossession, enabling, etc.). At the same time, however, possibly due to the erosion of the inflectional system, the more explicit prepositional competitors increase in frequency. The most prominent among these is the *to*-NP periphrasis, which corresponds best to the 'transfer'-semantics of the verbs most frequently used in the DOC already in Old English. This association between the *to*-pattern and the DOC then increases in strength, until the former is perceived as the prototypical analytic alternative to the previously synthetic datives – a development which is taken to constitute a key factor in the increasingly close association of datives with the semantic relations expressed by *to*, and particularly with basic 'give'-situations. As a consequence, uses at the periphery of that core meaning (i.e. uses not compatible with *to*-relations), are marginalised and eventually ousted from the DOC, and therefore become restricted to the prepositional variants (5).

(5) *whan a womman steleth hir body **from hir housbonde*** 'when a woman steals her body (away) from her husband' (c1390; Chaucer Parson's Tale)

This paper thus not only links two phenomena which are commonly viewed as independent, but also demonstrates that they were strongly correlated, and that a causal relationship between them may plausibly be assumed. By doing so, it aims to contribute to our general understanding of the complex interplay of semantics and syntax in argument structure changes.

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The Grammaticalization of Evidential and Epistemic Markers

Diachronic Developments in German Evidential Adverbials

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This talk deals with German evidential adverbials such as offensichtlich, offenbar, anscheinend, and augenscheinlich (‘evidently’, ‘obviously’, ‘apparently’) that represent one “evidential strategy“ in German amongst others (Diewald & Smirnova 2010). We present two studies. First, a corpus-based diachronic study that shows how the category of evidential sentence adverbials evolved mainly from manner adverbials in Early New High German. The second is an experimental study on the compatibility of a set of evidential adverbials with different evidence types in Present Day German (PDG).

Study 1: The major diachronic source for evidential adverbials, which are thought synchronically to belong to the category of sentence adverbials, are manner adverbials (cf. Swan 1988 for the similar development of speaker-oriented adverbials in English).

(1) Die trug er under dem Rock verborgen, da daz Wasser in waz, und die ledig
“The jug hidden under his coat contained water and the empty
Kanten trug er offenbar. (Eulenspiegel, 1515)
jug he carried visibly“

This can be seen as an example of Traugott´s (1989, 1995) third tendency of subjectification that “meanings tend to become increasingly based in the speaker´s subjective belief state/attitude toward the proposition“. While Traugott (1995) considers subjectification

primarily as a distinct and autonomous semantico-pragmatic process, it is not yet established that this is the (sole) causal factor.

In our view it can be advantageous to look more closely at the precise relation between form and meaning, i.e. the syntax-semantics interface (cf. Gianollo, Jäger & Penka 2014). In order to capture the multidimensionality of change we distinguish universal from language-specific mechanisms. We argue that the key step towards a sentence-adverbial interpretation in German is the possibility of a speaker-oriented interpretation, which correlates with (or, as we claim, is quite generally made possible by) a structural reanalysis of the manner adverbial as a (structurally higher) sentence adverbial. Our hypothesis is that there was a syntactic reanalysis of a potentially ambiguous surface structure, a configuration that is still reflected in PDG examples like the ambiguous (2).

(2) Die Chinesinnen haben das Spiel offensichtlich absichtlich verloren.
'The Chinese lost the game apparently/too obviously deliberately.'

The ambiguity stems from the fact that sentence adverbials in German can occur in a large number of surface positions, including a relatively low IP-internal position close to that of manner adverbials (which are generated as VP adjuncts). The precondition for this phenomenon is thus the relatively free word order in the German Middle Field. This development cannot occur in an identical fashion in other languages such as English, because manner adverbials and sentence adverbials are restricted to different positions ('Clearly, he sees the picture' vs. 'He sees the picture clearly').

Cross-linguistically the most influential account of sentence adverbials is the approach of Cinque (1999) which locates different adverbial functions to a cascade of dedicated functional projections. This can be related to the diachronic approach of Roberts & Rousseau (2003) which involves the creation of functional material from a lexical basis resulting from a universal preference for structural simplification. Note that a Cinque-style analysis is still controversial for German, where alternative approaches are discussed, for example some syntactic accounts of sentence adverbials like IP-internal adjunction (Frey & Pittner 1998), a semantically-driven word-order account without base positions (Haider 2000) (cf. also Ernst 2001, Nilsen 2004 for semantic accounts on English).

Study 2 addresses a recent meaning change among German evidential adverbials. The aim of this experimental study was to examine the compatibility of evidential sentence adverbials with a range of evidence types. The adverbials we tested were inter alia offensichtlich, augenscheinlich, anscheinend, dem Anschein nach and scheints. The participants rated the acceptability of a sentence with a given adverbial relative to a context that referred to either certain knowledge, visual-inferential evidence, or reportative evidence.

The study produced clear and surprising results. Evidential sentence adverbials that derive from the root „schein-" (seem/shine) might be predicted to be maximally acceptable in visual or inferential contexts. However, the experiment shows that especially anscheinend and the non-parenthetic innovation scheints (Axel 2010) are actually best in reportative contexts. We have corroborated this finding in corpus data from COSMAS II. While it is still unclear what mechanisms have brought this about, it will be apparent that this meaning specialization to reportative evidence cannot be argued to be a product of subjectification.

The two studies together yield insights into the wider correlation of structural and meaning development. We will conclude our talk with a discussion of the relevance of structural reanalysis as a catylist of meaning respecification.

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The grammaticalization of epistemicity in Ibero-Romance: alike processes; unlike outcomes

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Non-referential uses of the third person pronoun ello/ele/ell (henceforth ELLO) attested in non-standard varieties of Ibero-Romance are typologically anomalous within the null-subject parameter (Biberauer et al 2010) and the Romance language family:

(1)Ello hay un tro de vaina buena y un tro de vaina mala.

ELLO there.isa lot of thing good and a lot of thing bad
'There are a lot of good and a lot of bad things.' (Dominican Spanish)

(2) Ell sembla que en Joan està malalt, pobret!
ELLO seem.3sg that the Joan be.3sg ill poor.thing
'It seems that Joan is poorly, poor thing!' (Balearic Catalan)

(3) Espero que ele chova rápido!
hope.1sg that ELLO rain.subj.3sg quick
'I hope it'll rain soon' (European Portuguese)

In (1-3), ELLO appears in an apparently expletive position and function, despite the supposed ban on overt expletives in consistent null-subject languages (Rizzi 1982, 1986). Yet, closer inspection reveals that, synchronically, ELLO displays different characteristics and surfaces in different structural positions according to variety, and that the element has both discourse-oriented properties as well as (apparent) expletive characteristics even within the same variety.

My proposal is that ELLO's present-day variation instantiates the different stages and degrees of grammaticalization it has reached in the respective varieties in which it obtains. Using comparative data found in historical Spanish texts from both the New and Old Worlds, I argue that – contrary to previous hypotheses (Henríquez-Ureña 1939, Bartra-Kaufmann 2011, Gupton & Lowman 2013) – modern-day ELLO has an unexpected origin in epistemic impersonal constructions from the 15th century onwards:

(4) Ello es verdad que aparecio el dicho señal
ELLO be.3sg truth that appear.pst.3sg the said sign
'It is true that the said sign appeared.' (C15, Martínez de Ampiés, Tratado de Roma)

(5) Porque, si ello es verdad que no hace nada [...]
because if ELLO be.3sg truth that not do.3sg nothing
'Because, if it is true that he doesn't do anything...' (C16, San Juan de la Cruz, Llama de un amor viva)

(6) Ello es cierto y muy cierto que todos debieran ser doctos
ELLO be.3sg true and very true that all ought.3pl be.infin learned
lo más que pudiesen.
the more that can.impf.subj.3pl
'It is very clearly the case that they should all be as learned as possible' (C18, Forner, Los gramáticos)

Starting life as a referential subject pronoun, ELLO loses its referential properties but gains epistemic value through pragmatic inference (Nicolle 2011) and subjectification (Langacker 2006), becoming progressively reanalysed as a pragmatic marker of (epistemic)

value within the articulated C-space (Rizzi 1997) that includes a speech act layer (Speas & Tenny 2003, Giorgi 2010, Haegeman 2014).

Regarding the broader theoretical perspective, despite ELLO's heterogeneous outcomes in different varieties, the processes in the case of language change under investigation follow cross-linguistically attested pathways of grammaticalization. Specifically, the grammaticalization of speaker-oriented meanings would seem to be satisfactorily accommodated within models of upwards reanalysis along the functional structure posited by generative approaches (Roberts & Roussou 2003, Roberts 2011). Given, though, that higher functional projections have been argued to be featurally simpler than lower ones, the 1st person/speaker perspective associated with epistemicity and other speaker-oriented projections at the extreme of the left periphery might seem to be incompatible with the mechanisms of grammaticalization previously proposed in terms of unidirectional loss of features. Nonetheless, the empirical evidence offered by analysis of the diachronic development of ELLO would suggest that, sensu lato, the processes of grammaticalization and pragmaticization are alike insofar as both involve progression up the functional structure. Finally, ELLO's unusual origin would suggest that we should remain open-minded as to the potential set of sources from which the grammaticalization of epistemicity may arise.

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The grammaticalisation of the verb decir ('to say') in Spanish: the case of digamos (que) as a modality marker

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GOAL: The goal of this project was to analyse the linguistic behaviour of a grammaticalised form of the verb decir ('to say') in Spanish, the case of the subjunctive first person plural digamos (que), describing the main semantic and syntactic characteristics of this construction. From a pragmatic point of view, digamos (que) is a marker of epistemic modality whereas regarding syntax it presents different interesting features like scope or high mobility.

THE DATA: Digamos is the subjunctive first person plural of the verb decir, which designates an action associated with the articulation of sounds. Nevertheless, it has also developed a parallel grammaticalised meaning, different from the literal meaning of the verb decir:

(1) El jurado espera que digamos la verdad. (LITERAL MEANING)
The jury hopes that say the truth
'The jury hopes that we say the truth'

(2) Su interpretación es, digamos, 'apocalíptica'.(GRAMMATICALISED MEANING)
His interpretation is say apocalyptic
'His interpretation is, let's say, apocalyptic'

The first example shows the literal meaning of digamos which is associated with the lexical meaning of the verb 'to say'. However, the second sentence shows its grammaticalised meaning in relation to the speaker's confidence: its sense is the same as "let's say" or "roughly-speaking".

PROPOSAL: Regarding Pragmatics, we defend that the grammaticalised form digamos is associated with the epistemic modality, which expresses the degree of the speaker's confidence with respect to a formulated sentence. Actually, epistemicity is related to the speaker's evaluation about his or her formulation: "with epistemic modality speakers express their judgments about the factual status of the proposition" (PALMER, 1986). Especially, with the construction digamos (que), the speaker puts a distance between the proposition he or she is saying and his or her real thought, since with this word the speaker debilitates his or her

agreement in respect to the proposition and reduces the degree of the confidence. He or she does not really trust on the truth of the formulation. In the case of (3) the word 'digamos' indicates that the speaker has chosen the word 'discovery' like an approach, but not literally, in the sense that it is only an approximation and it must not be interpreted exactly, but like an idea:

(3) No quiso aprovecharse de su, digamos, "descubrimiento". (SOURCE: CREA)
Did not want to abuse of his say dicovery
'He did not want to abuse of his, let's say, "discovery".

Making reference to syntactic features, there are various interesting aspects related to this expression. For instance, this construction has 'scope', that is to say, its meaning covers an area affecting a part or the entire sentence. Thus, in example (2), which we repeat below, the epistemic sense of 'digamos' only affects the word 'apocalíptica':

(4) Su interpretación es, digamos, 'apocalíptica'.

Regarding this issue, the scope of digamos depends on the position of the construction. This is just another syntactic feature, since digamos can occupy different positions in the sentence because it has a high mobility. In general, it can occupy three different positions: the beginning, middle or final position in a given sentence. When it is found at the beginning, it must always appear with the conjunction 'que', which allows the introduction of a subordinate clause:

(5) Digamos que había cosas con las que no estaba de acuerdo.
Say that there were things with which that did not agree
'Roughly-speaking, there were things with which he did not agree.'

The most interesting case occurs when digamos is placed in the middle of the sentence having a parenthetical funtion. This position presents a high level of mobility, surpassing even the mobility of focus markers such as 'solamente' (only) which are characterised for its enormous mobility since they can appear in many different positions of the sentence depending on the speaker's will. For instance, digamos can appear between a quantifier and a Noun Phrase:

(6) a. Cuatro, digamos, corresponsales europeos.
Four say correspondents European
'Four, let's say, European correspondents'
b. *Cuatro solamente corresponsales europeos.
Four only correspondents European
'Four only European correspondents'

Finally, it is interesting to point that digamos takes part in different grammaticalised forms like "no digamos" (meaning needless to say) or "que digamos" (which remarks a previous negation and expresses some irony). Thus, the meaning will also change depending on the construction:

(7) El pescado estaba buenísimo, y no digamos el postre.
The fish was really good, and not say the dessert
'The fish was really good, not to mention the dessert'
(8) No era muy listo, que digamos.
Not was very clever, that say.
'He was not very clever, shall we say'

CONCLUSIONS: In some contexts, the expression digamos is a grammaticalised form, which has a different meaning from the literal form of the verb 'to say'. Pragmatically speaking, it is a marker of epistemic modality and indicates a lack of confidence from the speaker. Moreover, it presents a lot of syntactic features, like the scope and a high level of mobility.

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The origins and the grammaticalization of the spanish adv+c construction: from polarity particle to epistemic and evidential markers

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In my talk I want to discuss the possible paths of grammaticalization that led to the emergence of the Spanish construction exemplified by the following data.

(1) a. Seguro que todos los que amamos la historia y el fotoperiodismo agradecemos tal iniciativa.
sure COMP all the who love the history and the photojournalism thank such initiative
'Surely all of us who love history and photojournalism are thankful for such an initiative.'
b. Naturalmente que hay que conocer a Kafka.
naturally COMP have+to know to Kafka
'Naturally you have to know Kafka.'

The construction, for which I will coin the term ADV +C, consists of an element denoting epistemic modality (1 a) or evidentiality (1 b) which is followed by the complementizer que.

Syntactically, it is located in the left periphery of the clause, and its distribution supports a cartographic analysis (cf. Rizzi 1997) with the adverb located in the specifier of MODP and the complementizer as the head of FINP. The two elements obey strict adjacency; hence the specifier of FINP necessarily remains empty.

The properties of this construction in modern Spanish show that it cannot be treated as a mere variant of a biclausal copulative construction or a simple adverbial modification relying on the same lexical elements. A crucial semantic difference is the fact that, on the contrary to biclausal and adverbial constructions, ADV+C is infelicitous in out-of-the-blue contexts. This means that parts of what follows ADV+C must be given in the previous discourse.

From a diachronic perspective, my primary goal concerns the identification of the source of ADV+C. As already mentioned, synchronically, this construction cannot be assimilated to a mere variant of a biclausal copula structure. This leads to the question of whether such an assimilation can also be rejected for earlier stages of the construction. On the basis of a corpus-based study and with the support of historical data, I demonstrate that both constructions were independent, and that, therefore, the copula construction does not qualify as a source for ADV+C. Instead, I argue that its source is the affirmative polarity structure si+que. I also show that que was already expressing functions other than clausal subordination at least from the 14th century on, and that, ultimately, the combination of the affirmative marker si with que led to the grammaticalization of a productive pattern ADV+C. The observed cycle of grammaticalization therefore starts out with a limited set of elements and, subsequently, the abstracted grammatical structure became more and more productive. One could argue that an increase in productivity equals an increase in grammaticality, and in this respect the cycle discussed here is in line with what for instance for Campbell & Janda (2001) and Diewald (1997) constitutes a traditional cycle of grammaticalization.

More specifically, the analysis of the diachronic data show that cierto systematically combined with que much earlier than other epistemic or evidential adverbs that are found in ADV+C in modern Spanish.

(2) Cierto que me causa espanto.
certain COMP me cause fright
'Certainly this frightens me. '
(Anonymous, Poemas, 1536 - 1585)

Prior to this, cierto was already a highly frequent affirmative particle, and in this function, it alternated with si. In modern Spanish claro can also be an affirmative particle: crucially, this is not attested in CORDE before the late 19th century.

(3)- Cavallero bueno, ¿no veis cómo nos tienen apremiados estos nuestros enemigos?
knight good not see how us have urge those ours enemies
- Cierto, señora -dixo el cavallero Cifar-, oí dezir que vinieran a combatir fasta las puertas de la villa.
certainly lady said the kight C. heard say COMP would+came to fight to the gate of the town

'Great knight, haven't you seen how our enemies have put pressure on us? – Certainly, my lady – said the knight Cifar – I heard that they came to the gates of the town to fight us. '
(Anonymous Libro del cavallero Cifar, 1300-1305)

The combination of the affirmative si with que is subject to the same semantic restrictions as ADV+C and si+C is in modern Spanish (cf. Hernanz 2007), in the sense that part of the proposition introduced by it must be given.

(4) - Sosia. - Si que soy Sosia, sino piensas que me he oluidado quien soy.
S. yes COMP am S. if-not think COMP me have forgotten who am
'- Sosia. – Sure, I am Sosia, or otherwise do you think I have forgotten who I am? '
(Fernán Pérez de Oliva, Muestra de la lengua castellana, 1525)

Cierto que first appeared in Spanish data in the 16th century. I claim that it emerged as a result of an analogy with the already existing si que, since both cierto and si functioned as affirmative particles. The increasing frequency of cierto que over the next two centuries triggered the extension of ADV+C to other epistemic and evidential bases that were first attested in CORDE by the end of the 18th century.

The hypothesis sketched above is compatible with the corpus data and can explain the high frequency of cierto que two centuries before other adverbs appeared in the construction. By studying this particular process, I intend to shed light to the general study of grammaticalization of epistemic and evidential markers. I will focus on the contrasts in token frequencies in relation to when a given adverb first appears in ADV+C in CORDE and link it to the existence of different degrees of grammaticalization.

I will also offer arguments for why evidential and epistemic adverbs are both involved in this process of grammaticalization. Structurally this could be attributed to the positions they occupy in a cartographic representation. On the other hand, many scholars (Dendale & Tasmowski 2001, Nuyts 2001, Auwera & Plungian 1998) have argued for a semantic or pragmatic relation between evidentiality and epistemic modality which could facilitate the extension from one category to the other in a process of grammaticalization.

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How the German negative polarity item brauchen developed an epistemic interpretation

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The development of German NPI brauchen provides a deep insight how epistemic operators grammaticalise, as the epistemic interpretation only emerged in the late 18th century, a period for which there are much more sources than for the Old High German period, when the first epistemic modal verbs came into existence.

This paper focuses on the negative polarty and how it affects the development of epistemic readings. As it has been pointed out by Hofmann (1976: 94), Coates (1983: 85) Sweetser (1990: 62), Brennan (1993: 14), Drubig (2001: 43), the English ability modal can lacks any epistemic interpretation, unless in occurs in the scope of a negation. Obviously, negative polarity plays a similar role in the grammaticalisation of brauchen.

Based on evidence from Digitale Bibliothek Deutscher Klassiker, books.google.com and individual smaller corpus studies, the study outlined here suggests that the development of the German raising verb brauchen (‘need’) with modal semantics can be divided into four phases.

Phase I: until 1650. As Adelung (1793, 1162), Paul (1897, 79), Kolb (1964, 65) and Scaffidi-Abbate (1973, 5) illustrate, the transitive verb brauchen used to refer to the usage of something until the 17th century. Then, it acquired a new interpretation and could express a need for something. Crucially, the new variant of transitive brauchen started out as a negative polarity item, as shown by Paul (1897, 79). According to Scaffidi-Abbate (1973, 5) and Reis (2005, 106), the new meaning of brauchen was the crucial condition that facilitated the selection of infinitive complements.

Phase II: 1650-1700. brauchen acquires an impersonal pattern. Obviously, this development was caused by language contact with the French pattern il faut ‘it is necessary. . . ’.

Furthermore, it is plausible to assume that availability of a variant without referential subject argument facilitated the development of a raising pattern.

Phase III: 1700-1800. In the early 18th century, brauchen is attested for the first time with zu-infinitive complement. In this phase, brauchen with an infinitive complement realises its past participle as a ge-participle. In the same period, the irregular subjunctive of the past form bräuchte is already attested. As it appears, brauchen had already developed the full range of functions by the end of the 18th century: it could be used as a quantificational modal verb and as an epistemic modal verb. It is only in the end of phase III when brauchen with a zu-infinitive complement has been mentioned by a grammarian for the first time, cf. Adelung (1793, 1162).

Phase IV: around 1800. Finally, brauchen started to realise its past participle as an infinitivus-pro-participio IPP. At this point, brauchen is not attested with a zu-infinitive yet. At the same time, Grimm (1837, 168, 949) notices that the IPP is a property that is restricted to verbs that take bare infinitives. Thus, it must not be applied to brauchen which selects zu-infinitives. Simultaneously, the first uses with brauchen with bare infinitive occur. In the late 19th century, the normative philologist in Wustmann (1908, 61) refutes this as it is incorrect German.

There were similar verbs in neighbouring languages that were already more grammaticalised before brauchen has started its development. As Murray (1933, 71) demonstrates, need, the English counterpart of brauchen, has developed into an modal auxiliary like verb much earlier. First of all, it could be used in an impersonal pattern already in the 14th century. Moreover, need is already attested from the late 14th century with to-infinitives and from the late 15th century with bare infinitive complements. In the 16th century, it started to lose the -s-suffix in the 3. person singular. Some of these developments are illustrated by the examples taken from Murray (1933, 71).

Finally, it will be shown that, based on evidence from many Indo-European languages and from Yoruba that epistemic modifiers are modifiers of speech acts, whereas there non-epistemic counterparts are modifiers of events and that the grammaticalisation of modal verbs is a change from event modifier to speech act modifier.

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That sounds like grammaticalization: the development of Dutch klinken as an evidential verb

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Much has been written on the grammaticalization of raising verbs such as promise, threaten and seem, and the related development of evidential/epistemic meanings (Boye 2010, De Haan 2007, Traugott 1997). However, the grammaticalization and evidentiality of a different class of verbs that exhibit raising, the perception verbs, has been overlooked. This is remarkable as the perception verbs, at least in the Germanic languages, constitute the 'most obvious markers for evidentiality' (Whitt 2010:249). In this talk, I suggest that the Dutch perception verb klinken 'to sound' has developed into a grammaticalized evidential. Following Traugott (1997) on promise and threaten, I propose that subjectification, in which the verb's meaning becomes 'increasingly based in the speaker's subjective belief state' (1997: 185), is the motivating force for the shift in meaning. The verb under discussion is klinken 'to sound', whose original concrete meaning is given in 1. The earliest attestation of this verb is given in 2. This type of klinken is intransitive and takes a thematic subject, which can be animate or animate, but is restricted to entities that have the ability to emit sound.

1. klinken to emit sound
2. Om dat coper clinket clare
'In order for the brass to emit a clear sound'
(Rijmbijbel, Jacob van Maerland, 1285)

My purpose in this paper is to demonstrate that klinken has developed into a grammaticalized evidential, based on signs of semantic bleaching and the emergence of its use as a raising verb. I present synchronic data from acceptability judgement tasks that I have conducted on 24 native Dutch speakers, in which participants were asked to rate constructions containing klinken in various evidential contexts. These data show that raising klinken (while maintaining its original meaning) has acquired a new abstract meaning 'to seem, based on direct

auditory, inferential auditory, or hearsay evidence'. This process of semantic bleaching allows the subject to be increasingly abstract without restrictions, and even to be a non-thematic expletive (4). This latter notion points towards the verb's loss of ability to assign a thematic role to its subject.

3. klinken to seem, based on auditory evidence

4. Het klinkt alsof Jan ziek is

'It seems like Jan is ill (I've heard it)'

I show that klinken here is a true evidential and not simply an evidential strategy, as Anderson's (1986) criteria for evidentials are all borne out for these constructions (disregarding his morphology-specific claim): 1) klinken shows justification for the factual claim (auditory evidence), 2) klinken is not the main predication (but specifies the factual claim of 'Jan is ill' in (4), and 3) klinken has the indication of evidence as its primary meaning.

Without having clear indications of when raising klinken emerged, attestations of predicative raising have been found, see 5 and 6 (the latter from the Compilation Corpus Historical Dutch, E. Coussé 2010). However, it seems that the meaning of the verbs in these constructions has not been fully bleached, i.e. klinken in these examples means 'to sound', which is apparent by the phrase in de/d' ooren 'in the ears'.

5. Het klinckt my […] wat te wreed in d'ooren

'It sounds to me a bit too cruel in the ears'

(Het Tweede Deel van't Hollants Praetjen, Anonymous, 1650)

6. Wien de toon […] wat hard in de ooren klinken mag

'Whose tone could sound a bit loud in the ears'

(Bezwaren tegen den geest der eeuw. I. da Costa, 1823)

I propose that the development of klinken into a grammatical evidential is the result of subjectification, in Traugott's (1997) diachronic sense: klinken has shifted from an objective acknowledgement of sound (e.g. 'something makes a sound') to a subjective acknow-ledgement of sound (e.g. 'hearing something has led me to form this proposition/ judgement'). In the latter reading, the speaker becomes a semantic argument of the verb that is not linguistically realized.

This discussion on klinken raises questions about the relation between raising and grammaticalization: does grammaticalization of raising verbs always follow the same path? So far, it appears that klinken behaves like other types of raising verbs (e.g. promise, threaten, seem, klinken) in that it follows the same grammaticalization features in its development from a full thematic predicate to a raising predicate: semantic bleaching, loss of ability to assign thematic role, and the rise of an evidential/epistemic meaning motivated by subjectification. The findings on klinken have implications for the discussion of evidentials in general, as they not only show that grammatical evidentiality is not always morphologically marked, but also that 'non-exotic' languages (Aikhenvald 2004) like Dutch also appear to have grammatical evidentiality.

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The Japanese epistemic particle no as a marker of direct evidence

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The Japanese evidentials mostly discussed in the field are a reportative evidential sooda, a hearsay evidential -rashii (which also has a simile-use), and a direct evidential yooda. On the other hand, there are some recent analyses ascribing evidential properties to the particle no, which has been analyzed as an epistemic, but not as an evidential marker.1 Quoting Aoki (1986), Aikhenvald (2004:81) remarks that as a "morpheme […] referring to validation of information rather than the way it is obtained", no is of limited relevance to the study of evidentiality. However, Hara (2006) and Sudo (2013) observe that in utterances with the inference marker daroo and in Japanese polar questions, respectively, no marks (perceptual) contextual evidence, a use not covered in Aoki's paper.

In modern Japanese, no has at least three distinct functions with different syntactic positions. First, no can function as a nominalizer, for example when an event denoted by a clause with a verbal predicate occurs in argument position:

(1) Densha-ga tsuku *(no-)o mita.
Train-NOM arrive no-ACC saw
"[I] saw the train arrive." (lit.: ...the train's arriving)

Here, no heads a nominal phrase, allowing "see" to select "the train arrive" as a direct object.

Next, no functions as a complementizer, for example in focus constructions:

(2) Densha-ga [tsuku FOC] *(no-)o mita *(no) dewanai.
Train-NOM arrive no-ACC saw no COP.NEG
"[I] didn't see the train arrive." (I saw it depart.)

The second instance of no has a syntactic function in that it allows negation to target the focused verb "arrive" but not the verb "see".

The third function of no is that of an epistemic particle in the sentential periphery:

(3) Densha-ga [tsuku FOC] *(no-)o mita no dewanai no (da).
Train-NOM arrive no-ACC saw no COP.NEG no COP

In (3), the final instance of no can indicate surprise on part of the speaker, or that she is stating a fact already known to the addressee. This epistemic function of no contributes to the expressive meaning, and has allegedly evidential properties in two types of utterances.

First, utterances with the inference marker daroo are infelicitous without no when the inference is based on perceptual evidence:

Context 1: The speaker sees many empty wine bottles in John's room.

(4) Kinoo John-wa wain-o takusan nonda #(no) daroo.
yesterday John-TOP wine-ACC a_lot drank no INFER

Context 2: John is late for work (and likes wine a lot).

(5) Kinoo John-wa wain-o takusan nonda (?no) daroo.
"I guess John has had a lot of wine yesterday" (based on Hara 2006:124)

The speaker in (4) conjectures based on perceptual evidence that the proposition of the utterance might hold, which makes no mandatory. When there is no such evidence as in (5), no is not required for felicity. Note that the version with no is degraded when uttered out of the blue.2

1 There is no consensus in the literature as to what exactly the meaning of no in its expressive use is. Two detailed studies are Noda (1997), who identifies "givenness" as the core of its expressive meaning and Najima (2007), who criticizes "givenness", analyzing (sentence final) no in terms of relevance.

2 The felicity conditions of the utterance then depend on epistemic states of the speaker and/or addressee – a case of the epistemic particle no in assertions.

Second, positive polar questions are infelicitous without no when there is contextual evidence that their base proposition holds (in case of a positive polar question, the affirmative answer):

Context 1: The addressee enters the windowless room with a dripping wet raincoat on.

(6) Ima ame futteru #(no)?
now rain be_falling no

Context 2: Asking about the weather on the telephone.

(7) Ima ame futteru (#no)?
"Is it raining?" (based on Sudo 2013)

In (6) no is mandatory as there is perceptual evidence for the truth of the proposition. When there is no such evidence, as in (7), adding no makes the question unfelicitous.

In neither of (4) or (6), the addition of no necessarily has an effect on what is conveyed regarding the speaker's epistemic state, which could lead to the conclusion that it is indeed a

firsthand evidential marker (or strategy). However, no is only reduced to its evidential overtones in limited cases, which are therefore best analyzed as conventionalized uses.

Shibatani (2011) argues that modern Japanese no has developed in the 16th century as an element deriving NPs from already nominal(ized) elements "with the effect of contrasting the referent of this NP with some other entity". If its use with verbal elements has only developed later, so must its use as a complementizer have. We conclude that the allegedly evidential cases we are discussing are instances of an epistemic particle no as they occur in the outermost of the three possible positions identified above:

(8) Densha-ga [tsuku FOC]no-o mita no dewanai {no? / no daroo.}

Following the claim in Hiraiwa & Ishihara (2002) that no in focus constructions (the second instance in (8)) is a Finite Phrase head within an articulated CP-framework (cf. Rizzi (1997)), the epistemic particle no is either located in a higher projection than FinP, or has developed into a sentence-final particle which does not head any projection. This confirms the assumption made for example in Roberts (2010) (for projections within IP) that diachronic change moves towards higher syntactical projections. We propose a grammaticalization process for no from nominalization marker to particle as follows:

nominalization marker>nominalizer>complementizer>epistemic particle

selects:nominal(ized) elements verbs clauses (utterances)

Regarding the question of how epistemic and evidential meaning (or bias) interact and whether the latter can be derived from the former (epistemic bias due to evidence), we argue that they are distinct in the two cases discussed here, but possibly not in other uses of no as an epistemic particle. We expect further research, particularly on correlates of no in Japanese dialects, to contribute to the understanding of how its evidential properties have developed.

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A diachronic inquiry into English turn out and Spanish resultar mirative constructions: a case of ongoing grammaticalization?

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As raising verbs, English turn out and its Spanish equivalent resultar can take both that¬- and infinitive clauses as complements. In addition to their hearsay and inferential evidential readings (cf. Cornillie 2007, 2008 for resultar; Howe & Heller 2010 for turn out), such constructions express mirativity, i.e., they signal information which is new or unexpected to the speaker, with overtones of surprise and counter-expectation (cf. DeLancey 1997, 2012). This paper focuses on those resultar and turn out constructions involving a que/that complementizer:

(1) Resulta que los lobos han desaparecido oficialmente en Estados Unidos. La cacería descontrolada, los prejuicios […] acabaron con esos nobles animales. (CORPES XXI)
('It turns out that wolves have officially disappeared in the United States[…])
(2) It turns out that elephants have an advanced sense of self, which means in part that they're smart enough to be capable of really caring about others. (2008, COCA)

Despite their clausal structures, which syntactically characterize them as matrix clauses, functionally, they can be considered comment clauses (cf. Thompson & Mulac 1991; Boye & Harde 2007; Brinton 2008), as these constructions behave as disjunct adverbials which convey secondary information (Kaltenböck 2013: 287). In the case of resulta que and it turns out that, both of which are prototypically found at left periphery (cf. Beeching & Detges 2014; Traugott 2014), such information consists mainly in the expression of evidential and, most prominently, mirative nuances. The study of evidential comment clauses such as these is especially relevant, since they seem to be evolving towards grammaticalized parenthetical expressions whose functions resemble those of pragmatic markers (cf. Dehé & Kavalova 2007; López-Couso & Méndez-Naya 2014, 2015):

(3) Y así trato también de informar […] al personal que trabaja en la embajada que ahora, resulta, cada uno cuando tiene que dar respuesta a una carta tiene que venir a... mi oficina por fuerza (CDE)
(4) Turns out, the hill was more like a steep mountain (COCA)

The present paper tackles the diachronic development of such evidential and mirative verb constructions with resultar (1, 3) and turn out (2, 4) from the perspective of grammaticalization from multiple sources (De Smet et al 2013).

(5) Nin tanpoco pueden seer conpuestos de elementos por los jnconujnjentes suso dichos. de lo qual resulta que los spiritus malignos non pueden tomar cuerpos (1445, CORDE)

(6) The day has turned out better then I expected it. (1769, OED)

Thus, this corpus-based study explores, on the one hand, the mechanisms which condition the evolution of turn out and resultar from their original meanings as lexical change-of-state verbs (5-6) towards their eventual intersubjectification and grammaticalization as verbs expressing evidential and mirative nuances (1-4). On the other, it delves into the development of these constructions as comment clauses and, ultimately, as parenthetical expressions (3-4), from their earlier attestations as matrix clauses (5-6). My preliminary results show that both constructions exhibit diverging, though closely related, paths and degrees of grammaticalization. While the English parenthetical turns out (4) has already been grammaticalized, Spanish resulta (3) is still on its way to becoming grammaticalized.

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A cross-linguistic study of evidential parentheticals in English, French and Spanish: needless to say and related expressions

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This paper aims to trace the diachronic development of evidential formulas such as English needless to say, French ça/cela/il va sans dire and Spanish ni que decir tiene. These expressions, all of which feature verba dicendi, suggest shared knowledge and are synonymous with obviously and evidently:

(1) About six months into our relationship, his latest book came out. He asked me not to read it, but, needless to say, I downloaded an electronic copy as soon as I could (COCA, 2011)
(2) Je reconnais immédiatement la voix, cela va sans dire. (FRANTEXT, 2009) (‘I immediately recognized the voice, that goes without saying.’)
(3) La Priora, ni que decir tiene, [...] no sabía qué hacer con aquella loca y la metió en celda incomunicada de castigo. (CORDE, 1956). (‘The Prioress, needless to say, […] didn’t know what to do with that madwoman and as a punishment, locked her up in a cell.’)

This type of parenthetical expressions (1-3) allows the speaker/writer to make certain assertions regarding the obviousness of what s/he is about to state (cf. Cornillie 2009, 2010) and ‘the likelihood of its being a fact’ (Chafe 1986: 264). By employing such formulas, speakers/writers acknowledge that this is known information, and thus convey their ‘attitude towards, or opinion about, the truth of a proposition expressed by a sentence’ (Simpson 1993:

47). Moreover, these expressions are used both as hedging devices to shade categorical assertions (Adolphs 2007: 257) and as a face-saving strategy (cf. Degand 2014; Traugott 2014).

Thus, in this paper we set to account for the historical development of these parenthetical constructions (examples (1-3)) (cf. Dehé and Kavalova 2007; López Couso and Méndez Naya 2014) from their earlier attestations as matrix clause structures (cf. (4-5)) and comment clauses (examples (6-7)) (cf. Thomson and Mulac 1991; Brinton 2008; Kaltenböck 2013):

(4) It is nedelesse to speake of the price. (OED, 1530)
(5) It is needless to say that thousands and thousands have migrated to other places. (OED, 1770)
(6) I think it is needless to tell you I shall very anxiously look for you. (CLMET, 1794)
(7) It is needless to say, I ought to be able to respect and honour the man I marry, as well as love him (CLMET, 1848)

Needless to say is the oldest of these constructions, dating back to the sixteenth century, followed by the French expression cela va sans dire, which has its roots in the seventeenth century. In contrast, ni que decir tiene is only attested from the nineteenth century on. Furthermore, these expressions, which are typically found at left-periphery, have undergone a process of (inter)subjectification over time (cf. López-Couso 2010; Traugott 2010) to acquire an essentially interactional function, aimed to seek agreement with the interlocutor(s).

Data for the present paper has been drawn from several diachronic and synchronic sources, including ARCHER (3.2), EEBO, CLMET 3.0, COHA and COCA for English, CORDE and CREA for Spanish, and FRANTEXT for French.

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The rise of mirative markers in Japanese via grammaticalization processes

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1. Introduction As a phenomenon closely related to evidentiality which marks source of information, mirativity has been often dealt with in the literature. According to Aikhenvald (2004: 209), "mirativity is a grammatical category whose primary meaning is speaker's unprepared mind, unexpected new information, and concomitant surprise." In this paper, we focus on mirative markers in Japanese, since they have not been seriously studied so far and it is not known what kind of morphemes have mirative functions in Japanese. We attempt to identify mirative markers in Japanese and explain their occurrence in the system of Japanese grammar in a principled way.

2. Mirative markers in Japanese: some sentence final particles Japanese is an SOV language and has a variety of particles, including sentence final particles attached to verbs. We observe here that some of the SFPs function as mirative markers in Japanese. Specifically, we consider the three particles, no, koto and tte, to be candidates of mirative markers. Let us see the following sentences containing them:

(1) kimi-wa nante kawai-i-no.
you-TOP how cute-PRES-MIR 'How cute you are!'

(2) ame-ga hido-i-koto!
rain-NOM heavy-PRES-MIR 'How heavily it rains!'

(3) Kimi-ga kekkon- suru tte?
you-NOM marry- do MIR 'Is it true that you are getting married?'

Given that exclamative sentences express the speaker's surprise and unexpectedness, it is natural that mirativity is often linked to exclamative meanings. In fact, mirative markers are observed in exclamative sentences cross-linguistically. In Japanese exclamative sentences like (1) and (2), no and koto resist their omission, as shown in:

(1') ?*kimi-wa nante kawai-i!
you-TOP how cute-PRES 'How cute you are!'

(2') ?*ame-ga hido-i!
rain-NOM heavy-PRES 'How heavily it rains!'

This strongly suggests that no and koto function as markers of unexpected and surprising information, that is, mirative markers. Turning to (3), this utterance expresses the speaker's surprise at the news informing that the hearer is getting married. It can be said that the marker tte marks the unexpectedness of the speaker, since it cannot be omitted with the mirative denotation intact, either:

(3') ?*Kimi-ga kekkon suru?
you-NOM marry do MIR 'Is it true that you are getting married?'

(3') only has an interrogative interpretation. The observations in this section suggest that the sentence final particles no, koto and tte are mirative markers in Japanese.

3. A polyfunctional nature of mirative markers in Japanese The next question to be addressed is why no, koto and tte behave as mirative markers. To answer this question, let us consider first what their shared property is. What should be emphasized is that they are

polyfunctional morphemes. More specifically, they can be used as complementizers in a traditional sense in generative syntax.

For example, as argued in the literature, no appears in cleft sentences as a complementizer.

(4) [Kawai-i-no]-wa Mary-da
cute-PRES-C-TOP -COP 'It is Mary that is cute.'

No introduces the clause kawai-i as a complementizer. Koto is also an introducer of a clause. In particular, it introduces a factive sentence:

(5) John-wa [Mary-ga kekkon-sita koto]-o sitteiru
-TOP -NOM marry-did C-ACC know
'John knows that Mary got married.'

Koto functions as a complementizer in (5).

As for tte, it can be said that it is an allomorph of the complementizer to, introducing a sentence selected by a so-called bridge verb like omou 'think,' as illustrated as follows:

(6) John-wa [Mary-ga kekkon-sita to]-o omotteiru
-TOP -NOM marry-did C-ACC think
'John thinks that Mary got married.'

In fact, the form to, instead of tte, can appear as a mirative marker in (3), supported by the copula da:

(3'') Kimi-ga kekkon- suru da-to?
you-NOM marry- do COP-MIR 'Is it true that you are getting married?'

Again the mirative marker tte or to can be used as a complementizer.

4. Grammaticalization and the split CP hypothesis Based on the polyfunctional nature of the Japanese mirative markers, we propose that they arise as a result of grammaticalization of complementizers. Under the split CP hypothesis developed by Rizzi (1997), the complementizer system is multi-layered, decomposed into Fin, Topic, Focus, and Force, as illustrated in (7):

(7) [… Force [… (Topic*) [… (Focus) [… (Topic*) [… Fin TP …]]]]]

Roughly speaking, no, koto and to used as complementizers are considered to be Fin.

How about no, koto and to used as mirative makers? According to Belletti (2013), Focus positions license an interpretable feature related to correction/contrast. Moreover, she suggests that a 'mirative' feature falls into this type. Belletti's insight leads us to conclude that the mirative markers no, koto and to are just realized as Focus heads.

In sum, no, koto and to are realized forms for Focus as well as for Fin. It looks as if they can undergo head movement from Fin to Focus (cf. Roberts and Roussou (2003)). We thus analyze no, koto and to as grammaticalized from Fin heads into the mirative markers realized as Focus heads. Fin is the lowest functional head in the CP layer and Focus is located in a higher position. If a functional category in an outer position is more functional, this grammaticalization is Secondary grammaticalization in the sense that the less functional no, koto and to are developed into the more functional counterparts. Note that koto can be used as a pure noun meaning 'thing.' This means that it also undergoes Primary grammaticalization from a lexical category to a functional category.

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The German epistemic and evidential markers wirklich, sicher, bestimmt, ja, wohl: semantic and syntactical features.

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In German, epistemic and evidential modality can be expressed in a variety of ways. If a speaker wants to explicitly validate what (s)he affirms, (s)he can add an affirmation like das ist wahr 'that is true'. German possesses validity markers which can be integrated within the utterance and which derive from other word classes, such as the rare wahrlich 'truly', to which modern German prefers the more frequent wirklich 'effectively, really'. Whereas the lexical roots of wahrlich and its Italian equivalent veramente link directly to the concept of 'truth', the lexical roots of wirklich and its Italian equivalent effettivamente link to "reality" or effectiveness in the real world within which a proposition has a truth value.

In order to understand whether a competent language user, such as a professional translator, discriminates between references to "truth" and "reality", this contribution analyses translations of wirklich by comparing Gisela Heidenreich's novel Das endlose Jahr (2002) and its Italian version Nel nome della razza ariana (2004), arriving at the conclusion that, even if the target language possesses equivalents, the translator does not discriminate between "truth" and "reality", and also freely uses evidential or other expressions instead (such as evidentemente 'evidently' or proprio 'just'), or even omits any explicit truth validation by not translating wirklich.

Instead of directly undercutting the truth value of an affirmation, sicher 'surely', and its synonym bestimmt 'certainly', judge the probability that what is affirmed can be true or real: this probability is very high. Whereas the etymology of sicher and its Italian equivalent sicuramente excludes the risk of failing the probability evaluation, the etymology of bestimmt and its Italian equivalent certamente underlines the definiteness of what is affirmed. The analysis of their occurrence in Heidenreich (2002, 2004) shows that both words are translated into Italian without distinction by certamente, sicuramente, or similar evidential or other types of markers. The question that arises is whether the lexical meaning of epistemic and evidential markers is rather vague and shadow-like.

Before giving an answer, we should examine another group of very frequent evidential markers used especially in conversational language: ja and wohl. Integrated as stance markers inside a sentence, they have no equivalents in either Italian or English: in Heidenreich (2004) they are translated by a host of different evidential, epistemic, causal or other expressions, and very often they are not translated at all. Without a doubt they have lost their lexical meaning which can be retrieved only as their hidden essence: the affirmative character of the particle ja, or the positive one of wohl (cfr. Engl. 'well').

Furthermore, wirklich, sicher, bestimmt, ja and wohl have homonyms in other word classes. When wirklich, sicher and wohl are used as adjectives in pre-nominal attributive, ad-nominal predicative or ad-verbal adverbial functions, they maintain their full lexical meaning, can be negated by nicht 'not', have a comparative form and can answer wh questions. Also, when ja, sicher and bestimmt autonomously substitute a sentence as a response particle, their lexical meaning is evident. However, used as unstressed adjuncts for which it is impossible to ask by means of apposite interrogative elements and which cannot be negated, the meaning of wirklich, sicher and bestimmt is bleached in favour of their new function: wirklich expressing the grammatical routine of validating the truth of what is affirmed, and sicher and bestimmt expressing a high degree of probability that what is affirmed can be true or real. Whereas their lexical meaning is still on their surface and the grammatical routine they express is overt, it is quite difficult to retrieve the original meaning of ja and wohl and even the complexity of the grammatical routine they execute: with both ja and wohl, the speaker conveys – but without underlining it – her/his confidence to the listener that things are as (s)he affirms; with ja (s)he connects two states of affairs in a relation conveying the 'natural' evidence of facts to the listener who, in her/his opinion, will simply see things in the same way, whereas with wohl (s)he she marks that what (s)he says is a subjective evaluation without considering the listener's expectations or knowledge.

Finally, from a topological point of view, we can sum up that the less movable epistemic or evidential markers are inside a sentence (the complex stance markers ja and wohl and the truth validator wirklich – analogue to the negator nicht – can only stay in the middle slot of the Mittelfeld , the central part of the German sentence, yet, the probability evaluators sicher and bestimmt can also occupy the Vorfeld as first autonomous clause constituents), the more grammaticalised they are. The improvement of their grammatical meaning – as confirmed by their syntactic behaviour – is proportional to the weakening of their lexical meaning – as shown by the heterogeneity of translations found in Heidenreich (2004) for each of the five examined words.

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The evolution of evidentiality and egophoricity in the Himalayas: The case of Bunan

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Tibeto-Burman languages of the Greater Himalayan region are renowned for their complex epistemic verbal systems, which revolve around the grammatical categories "evidentiality" (Aikhenvald 2004) and / or "egophoricity" (Tournadre & Dorje 2003; Hargreaves 2005). In the course of the past decades, a wealth of descriptive studies has considerably enhanced our synchronic understanding of these verbal categories. However, the diachronic processes that give rise to them have received little attention so far and are still poorly understood. The talk will address this research gap and describe the diachronic mechanisms that gave rise to evidential / egophoric marking in Bunan, a Tibeto-Burman language that is spoken by approximately 4,000 speakers in the North Indian Himalayas. The presentation will be based on a functional-historical framework and draw on contemporary Bunan data from personal fieldwork (Widmer forthcoming a) and historical Bunan data from the early 20th century (Francke 1909).

In a first part, the development of evidential marking in Bunan will be reconstructed based on language-internal evidence. It will be argued that evidential marking emerged in the past tense domain when a former periphrastic perfect construction developed into a synthetic past tense with an inferential connotation. This innovative inferential past tense then came to stand in opposition to an old past tense, which originally did not express any evidential / epistemic categories, but subsequently acquired a direct evidential construal in consequence of a generalized conversational implicature (cf. Atlas & Levinson 1981). In a second part, the further development of this dichotomic evidential system will be investigated. It will be shown that Bunan reanalyzed a former person distinction as an egophoric opposition (Widmer forthcoming

b; Widmer & Zemp in preparation). This diachronic process led to a fundamental restructuring of the past tense domain, which eventually gave rise to the modern Bunan verbal system, which distinguishes between an egophoric past tense, a direct evidential past tense, and an inferential past tense.

The talk will thus offer new insights into the hitherto poorly understood diachronic mechanisms that have given rise to complex epistemic systems in Tibeto-Burman languages of the Greater Himalayan region. Moreover, it will provide a basis for comparisons with diachronic processes that have triggered the development of similar systems in other linguistic areas, e.g. the Amazon Basin (Aikhenvald & Dixon 1998) or Papua New Guinea (San Roque & Loughnane 2012).

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From irreal comparison to evidential complementizers: How do they inscribe into a typology of processes leading to propositional modifiers?

Björn Wiemer (JGU Mainz, Institut für Slavistik)

The talk pursues two aims, the first focusing on a hitherto neglected (or overlooked) type of source expressions of evidential markers, the second on methodology.

Under the first aim, I show how complementizers marking inferential or reportative functions have been developing out of 'as if'-units (particles, conjunctions), and explore their chronological and contemporary relation (i) to particle use (first of all, regarding different ranges of functions within and outside evidentiality) and (ii) to epistemic "overtones". Contrary to Germanic, Romance and most Slavic languages, some 'as if'-units in Polish and Russian have turned into evidential complementizers (Pol./Russ. *jakoby* < *jako* 'like' +*by*.SUBJ, Russian units containing *budto* < *bud'* 'be.IMP.SG' + *to*.DEM). Some similar units in Baltic are on the verge of turning into such complementizers (Lith. *neva*, *lyg*, Latv. *it kā*). The evolution of 'as if'-complementizers in all these languages seems to be cyclic, since we find newer ones which, given favorable discourse conditions, "repeat" earlier developmental stages of already established markers (e.g., Pol. *niby*). We seem to be dealing with a very small areal cluster in the northern part of Eastern Europe. I will provide a comprehensive summary of a series of case studies (Wiemer 2008, 2010, 2015, submitted) and confront the findings with case studies on Engl. 'as if'-units (López-Couso/Méndez-Naya 2015), which have not acquired evidential functions. Moreover, I will show that the evolution of these evidential complementizers only partially intersects with the rise of reportative markers out of syntactically loosely linked quotatives and out of interpretive deontics (Holvoet/Konickaja 2011); the latter occurs also with modal auxiliaries (Pol. *mieć*, Germ. *sollen*) and, as such, is not restricted to devices of clause linkage (Holvoet 2012).

Furthermore, although 'as if'-units associate with irreality (as in Mauri/Sansò 2012: 102f.), the crucial feature constant in their semantic history seems to be suspended assertivity, which implies that the acquisition of complements with propositional status (vs. SoA-status, as in complements of perception verbs) is a necessary, but not a sufficient, step toward becoming an evidential complementizer (for the SoA-proposition distinction cf. Boye 2012). The specific contextual conditions favoring the development of 'as if'-units in Russian and Polish differ from the grammatical contexts of the South Slavic *da*-connective, which has not developed into an evidential marker. At least in Balkan Slavic, however, it has been a clitic persistently associated with suspended assertivity since the most ancient documented times (9th century AD). *Da* occurs as particle, complementizer and conjunction both in non-declarative (embeded or independent) speech acts and in declarative speech acts with factive verbs (here it contributes to an air of mirativity or related rhetoric functions, e.g. in deliberative questions). However, *da* has probably never been used as a marker of evidential functions (Wiemer, forthcoming), if not as a side effect in tight interaction with the necessity modal ('must') leading to univerbation and, thus, to a new epistemic particle (on Mac. *mora da* cf. Wiemer 2014). This remarkable difference between 'as if'-units, on the one hand, in Polish and Russian, and, on the other hand, South Slavic *da*, suggests that suspended assertivity and occurrence after comparable com-plement-taking predicates (CTPs) is not enough for a connective to become tightly connected to evidential functions; for a long time, *da* has been used after CTPs denoting cognitive attitudes or speech acts as well, but it has kept its sole function with such CTPs of introducing directive speech acts (related to deontic, but not to epistemic modality).

With regard to the second aim, I argue that none of the cases mentioned above are indicative of grammaticalization but, rather, primarily exhibit lexicalization via univerbation. The se-mantic history of these expressions can, to some extent, be captured as a result of tightening of syntagmatic associations with specific CTPs (as far as subordinators are concerned); particle use is diachronically primary, but was affected by this semantic evolution as well. No syntactic reanalysis occurred, contrary to, e.g., SAY-units (like DIZQUE in Romance; Cruschina/ Remberger 2008). These, however, do not represent grammaticalization, either. Among other things, the reason for this is because no syntagmatic tightening occurred, rather just the oppo-site, namely "parentheticalization" or the rise of sentential adverbs/epistemic particles, happen-ed: a former CTP (with or without a part of its argument structure and/or a former complement-izer) gets isolated from the constituency structure and communicatively downgraded (Boye/ Harder 2007). Any attempt to explain this as grammaticalization would essentially imply that this newly born (lexical!) unit fills some sort of slot, as a morpheme would form part of a word ("for a sign to be grammaticalized means for it to acquire functions in the analytic formation of more comprehensive signs"; Lehmann 2002: 1). However, the process of cliticization > agglutination > fusion differs from reanalysis by which epistemic adverbs/particles or comple-mentizers are created: what would the format of the larger unit providing a slot for this newly born unit be?

Thus, my contribution also targets a more consistent typology of linguistic changes which end up with propositional modifiers.

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Habituality and Genericity in Flux

Habituals and generics in Dargwa: A cycle of innovation and displacement

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Dargwa languages (East Caucasian) possess a very rich array of habitual and generic forms. This paper concerns the present-tense system, where there are up to four finite forms (both synthetic and periphrastic).

Converbal present This periphrastic form consists of the combination of the imperfective (simultaneous) converb with the clitic person-number marker or copula (in the 3rd person, omitted in some varieties. The converbal present is the least marked and most polyfunctional present form:

(1) du-dil ʔąki b-irq'-u-l=da
I-erg work n-do.ipfv-sim-cvb=1
'I am doing the work.' (progressive, Shiri)

(2) dam b-ak’-ul=da murad sᾳ-q’ˁ-ɥn
me.dat n-know.ipfv-prs=1 M. hither-come-ant[cvb]
‘I know that Murad has come.’ (durative, Ashti)

(3) har baj ta-j-ɥlħ-ɥn=da
Every day ante-el-[m]see.ipfv-prs=1
‘I see him every day.’ (habitual, Ashti)

(4) ul-b-ad-ij kam-mi b-ɥlħ-ɥn=da
eye-pl-obl-dat little-obl n-see.ipfv-sim=1
‘My eyes see little.’ (generic, Ashti)

Existential present Existential present is formed exactly as the converbal present, but with the person marker/copula replaced by one of the existential verbs indicating the spatial location of the action:

(5) murad-li ʔᾳki b-irq’-u-l k’e-w
I-erg work n-do.ipfv-sim-cvb exist.above-m
‘Murad is working up there.’ (Shiri)

In most dialects which possess this form, e.g. Shiri and Kubachi, it has a progressive meaning; moreover, it must describe an action that is happening in the direct vicinity of the speaker (hence the use of the deictic existential). However, in some dialects, notably in Megeb, the existential present has completely replaced the converbal present in all functions:

(6) sija b-iq’-uwe le-w=ra ħu?
what n-do.ipfv-cvb cop-m=1 thou
‘What are you doing?’ (Megeb, Sumbatova, 2008)

Synthetic present The synthetic present is a typical “old present” (REF). It seems to go back to an earlier periphrastic form that has become morphologized, as seen e.g. from the fact that the 3rd person ending in -ar also serves as a participle ending in some fossilized forms.

The functions of the synthetic present are quite varied. In all varieties, it expresses gnomic meanings, i.e. “general truths” (in proverbs and similar expressions):

(7) ic-i gu-d-ubkː-u, q’ʷil-i icː-u
ox-pl sub[lat]-npl-yoke.ipfv-prs.3 cow-pl milk.ipfv-prs.3
‘Oxen are yoked, cows are milked.’ [‘Each thing has its own purpose’] (Icari, Sumbatova and Mutalov, 2003)

This is the only function of this form in Ashti. In Standard Dargwa and other northern varieties, e.g. Tanti, it additionally has a future meaning. In certain other varieties, e.g. Shiri, the synthetic present has no future function, but has a more general habitual meaning in additional to the gnomic meaning. There are also some relic uses of the potential present: with the verb ‘to know’ (where it competes with the converbal present) and as the historical present.

Participial present Finally, the so-called participial present, found in some varieties, represents a typologically unusual kind of habitual, the so-called qualitative (Shluinsky, 2009). It is similar to a generic but, unlike the latter, is participant-oriented, i.e. expresses some action as a typical property of the subject. Importantly, the use of this form does not imply that the action is performed repeatedly, or has ever been performed at all.

(8) iχ-til mašin b-iːs-u-zi-w=sa-w
that.below-erg car n-sell.ipfv-ptcp-attr-m=cop-m
'He's such a man that he sells cars.' [He cannot use the same car long enough, he sells it and buys a new one.] (Ashti)

Discussion The variation in the use of present-tense forms in Dargwa suggests that it is a result of a thorough remodeling of the original system. We may hypothesize that the Dargwa present-tense paradigm originally consisted only of the synthetic present. Later on, newly grammaticalized forms have repeatedly displaced certain functions, so that the use of the old present has significantly narrowed: to habitual + future or to the gnomic present. In a rather simplified way, this can be represented as follows:

Gnomic ← Generic ← Habitual ← Durative ← Progressive Future
↑ ↑
Cvb. Present Periphr. Future
Exst. Present

This idea is also confirmed by the way the endings of the synthetic present, accompanied by additional suffixes, are used in conditional and subjunctive forms, as well as in the present forms of the negative auxiliary akːu. In Ashti, the synthetic present endings also appear in the limitative form ('while', 'until'), which clearly does not imply any kind of habituality or genericity:

(9) ʔaʿči taman-b-uχ-aː-ži, kiž-ib katː-ilž-in
Work end-n-be.pfv-prs.3-until down:m:sit.pfv-ant[cvb] down-remain.pfv-pret.3
'He remained at work (lit. sitting) until he finished the job.' (Ashti)

Thus I believe that the displacement account in the spirit of Haspelmath (1998) is preferable in Dargwa to the habitual Ñ future account of Tatevosov (2005). However, the way the semantic evolution of the present in Dargwa has proceeded raises the question of whether all the functions we find in modern varieties necessarily correspond to distinct semantic notions. Is there, for example, a semantic notion of a gnomic present distinct from the generic? Alternatively, one may say that the use of the "old present" is conventionalized in a particular range of contexts which does not necessarily have to correspond to any coherent semantic notion.

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The Evolution of PAST-HAB in Cuzco Quechua

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In Cuzco Quechua, a periphrastic construction composed of an agentive nominalization in conjunction with the copula, which is optionally marked for the past tense (ex. (1)), is said to serve as a past habitual marker (Cusihuamán 1976, Hintz 2008). The present study focuses on the evolution of this periphrastic constructionin Cuzco Quechua, which embodies one possible trajectory for the grammaticalization of PAST-HAB.

A corpus comprising texts from three periods was analyzed in order to check the construction's morphosyntactic behavior as well as its semantic compatibilities. The corpus includes myths and penitential texts from 16th and early 17th century, *testimonios* dated to early-mid 20th century, and transcripts from Xavier Ricard Lanata's fieldwork around Mt. Ausangate from the early 2000's. The diachronic development of the construction in question replicates the cline suggested by Bybee, Perkins, & Pagliuca, 1994, based on actual historical documentation, and hence supports their findings but, interestingly, not fully: though the habitual marker in Cuzco Quechua is restricted temporally to the past, it does not require past tense marking. The case of PAST-HAB in Cuzco Quechua is a particularly interesting for two reasons. The first is that the different stages along the cline manifest themselves incrementally in other Quechuan dialects of the immediate vicinity. The second is that PAST-HAB has further grammaticalized into an imperfective and increased in scope, thereby not only shedding light on its emergence but also on its later development (ex. (2)).

Examples

(1) a. Ñoqa-qa tiro-pe-qa iskay chunka punto-ta-puni-n
I-TOP shooting-LOC-TOP 20 point-ACC-indeed-EV.1
rura-q ka-ra-ni
do-*q* AUX-PAST-1.B
As for me, in shooting I would score twenty points.

b. Sapa tuta-manta-n las seis
every night-ABL-EV.1 at six
alojado-kuna-q mikhuna puchu-n-ta horqo-mo-q ka-ni.
guest-PL-GEN food rest-3.B-ACC gather-CIS-*q* AUX-1
Every morning at six I would gather the food leftovers of the guests.

(2) a. Qosa-n-pas huk diablo-lla-taq ka-q.
husband-3.A-ADD a devil-DEL-CONT COP-*q*
And her husband was just a devil too.

b. Khayna-n gente waño-q.
like.this-EV1 people die-*q*
Like that, people were dying.

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Genericity in Middle German: The *Sachsenspiegel* and *Schwabenspiegel*

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Law books are a promising source for generic expressions and the phrasing of rules and habits. The Sachsenspiegel (SaS, c. 1220) is the oldest law book written in German (Middle Low German); the slightly younger Schwabenspiegel (SchwS, c. 1275) was written soon after the northern model, in Middle High German. Aims, addressees and structure of the texts are similar and taken together, the two sources offer reliable evidence for how speakers around 1250 would phrase generic statements.

My paper has two aims. First, I survey the patterns of generic statements in SaS and SchwS and compare them to their modern descendants and related patterns in other Germanic languages. Second, I will zoom in on the interplay of conditionals and generic DPs in SaS and SchwS. The writers carefully distinguished between generic statements about a type of *episode* and generic statements about a kind of *object/ person*. An analysis of the full range of grammatical patterns allows new insights in the nature of generic statements.

Patterns of generic statements. If we look at generic DPs, what we find is similar to ModHG. There are generic uses of definite DPs, indefinite DPs, singular indefinites with *ieglich/jewelk* (≈ 'whatever'); I moreover include free relatives of the *whichever* type because these provide an interesting link to ModHG conditional *wenn*.

1. *Sleit <u>die jode</u> eynen kerstenen man, oder dûth her yme ungerichte, dâ her mede begriffen wird, man richtet uber ine alse uber eynen kersten man.* (SaS III, 7 §2)
   Kills the jew a christian man, or does he him unjustice, if he amid caught gets, one judges over him as over a christian man.
2. *Daz ist da von, daz <u>ein gerihte</u> wiser liute niht enberen mac.* (SchwS C.237, §3; p.157)
   This is there from, that a court $\text{wise}_{\text{genitive}}$ $\text{men}_{\text{genitive}}$ not miss may
3. *<u>Ein ieglich man</u>, uf den man klaget, der sol antwurten nach sîner geburt und nach sînem rehte …* (SchwS Cap. 246; p.160)
   a whatever man, on that one sues, that shall answer after his birth and his right
4. *<u>Swer</u> umbe ungerihte wirt beklaget, der sol des ersten eines fürsprechen gern …* (SchwS Cap. 223; p.152)
   Whoever for unjustice gets sued, he shall firstly $\text{an}_{\text{genitive}}$ $\text{advocate}_{\text{gen}}$ demand
5. *<u>Swen</u> eyn man wîph nimt, sô nimt her in sîne were al ir gût* (SaS I, 31 §2)
   when-ever a man wife takes, so takes he in his possession all her goods

Conditional clauses are mostly expressed as V1, predecing their main V2 clause. Another frequent pattern are *ob*-clauses which can precede or follow the main clause. Finally, *swa* and occasionally *als* and *dâ* are used as conditional complementizers.

6. *(und) vindet ein man gut uf der frien straze ob der erden, daz sol er dem nähsten pharer (…) geben.*
   (and) finds a man goods on the free street above the earth, that shall he the next priest (…) give. (SchwS C.286, §1; p. 185)
7. *swa ein stumme ist, der niht antwurten mac, und vordert er einen fürsprechen mit geberden: den sol man im geben.* (SchwS C.280; p. 180)
   where a tumb is, who not answer may, and asks he an advocate with gestures: that shall one him give
8. *Ob die man an sînis vorsprechen wort nicht ne jêt, di wîle blîbt her sunder schaden sînis vorsprechen wordes.*
   if the man to his advocate's word not (ne) says (= agrees), the while stays he without damage of-his advocate's word (SaS III 14 §1)

Functions of conditionals. V1-conditionals are used to make generic statements about a kind of situation. They are the typical opening of paragraphs, raising a case for which proper legal reactions are then described. *ob*-conditionals, in contrast, are systematically used to describe hedges, sub-cases and exceptions in a scenario already given. For instance, in a description of what happens to lost and damaged goods, we find *wirt iz yme virstolen (…) oder stirft iz,* ***ob iz veh is*** ("is it him stolen, or dies it—if it is an animal"). In terms of discourse

structure, V1-conditionals raise a global QuD (what happens if …) whereas *ob*-conditionals are used in subquesions (in case that SubQ arises…). This impression can be substantiated by a count of local presuppositions triggered in clauses of either type.

Generic vs. episodic indefinites. All conditional clauses can contain indefinite DPs (e.g. 6, 7) which get bound by a universal/generic quantifier. For instance, (6) talks about any normal man who finds any kind of good on the street. However, (6) is intuitively not a rule about the generic man. If the Spiegel want to convey special laws for a group, the writers put the generic indefinite outside the episode-setting conditional, which leads to complex syntactic patterns:

9. *Paphen unde joden de wâfen vûhrent (…), dût men ine gewalt, men sol ine bezzeren alse eynen leyen (…)* (SaS III,2)
   Priests and jews who carry arms (framesetting generic), does one them hurt (V1-cond), one shall them refund like a lay person (would be refunded).

The difference between generic and episodic indefinites is hard to capture, and most current analyses of genericity and conditionals treat them on a par. German medieval law books exhibit systematic grammatical patterns to distinguish these two. These newly available minimal pairs shed new light on the nature of genericity and generic quantifiers.

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Remarks on the Grammaticalization of Characterizing Genericity

Hana Filip (Heinrich Heine University at Düsseldorf)

It is undeniable that there are close affinities between (characterizing sentential) genericity (in the sense of Krifka et al 1995), and habituality as its special case, on the one hand, and imperfectivity, on the other hand. This view is supported by both synchronic and diachronic arguments. Synchronically speaking, since Comrie (1976), it has been taken for granted that genericity/habituality is a subcategory of imperfectivity. Comrie's (1976, p. 26) main argument in support of this view is that "a large number of languages (...) have a single category to express imperfectivity as a whole, irrespective of such subdivisions as habituality and continuousness."

His examples include Romance (Italian and French) and Slavic languages (Russian) as well as Modern Greek and Georgian. Subsequently, most attention has been paid to the observation that imperfective forms alternate between progressive and habitual (generic) interpretations in dependence on context. Given that these two interpretations are tied to a single imperfective form, at first blush it is desirable to tie them to a single unified concept covering the whole imperfective domain (see also Comrie 1976:26, 1985). Diachronically speaking, the expression of genericity/habituality is tied to markers that become grammaticalized on the path from (present) progressive markers to imperfective ones (see Bybee and Dahl 1989), during which various intermediate stages arise and only "a certain form may come to be more or less exclusively used for generic contexts" (Dahl 1995, pp.417-8). However, the tendency for it to develop into a generic marker is never too strong (see ibid., p.425). In fact, it is taken for granted that it is the lack or extreme scarcity of dedicated generic markers that is a hallmark property of (characterizing sentential) genericity/habituality.

It is the goal of this talk to explore one salient example of a form that falls under imperfective aspect, in so far as it forms imperfective verbs, but that has undergone a process of grammaticalization of exclusively marking a generic interpretation of a whole sentence. To this goal, I will examine the properties of the Czech suffix –va- that Dahl (1975, 1985, 1995) uses as a paradigm example of a significant class of markers in a number of typologically distinct languages that are variously labeled as "habituals", "iteratives", "frequentatives" and the like, but to which he denies the status of grammaticalized generic markers. Some examples are: Arabic (Classical), Akan, Catalan, Didinga, Guarani, Sotho, Swedish, Yucatec Maya, Zulu (Dahl 1985; 1995, p.421, fn.8). Contrary to the common view of such markers, most clearly formulated in Dahl (1995), I will show that the Czech "habitual" (aka "iterative") suffix –va- has a number of properties prohibiting its classification as an imperfective marker simpliciter, and that clearly indicate that it is best viewed as a bona fide generic marker. To the extent that the Czech suffix –va- can be taken as a paradigm case of a type of a "habitual" marker attested in a number of typologically distinct languages (following Dahl 1975, 1985, 1995), this leads me to the following conclusions. First, we need acknowledge, or at least take seriously the possibility, that such markers are bona fide generic markers, and not markers of imperfective aspect. Second, if it is correct that there are bona fide markers of characterizing (sentential) genericity, but no "generic" articles or other markers within an NP/DP consistently enforcing its kind interpretation, this would seem to indicate that linguistic means for the expression of characterizing (sentential) genericity, but not kind-reference (characterizing (sentential) genericity and kind-reference in the sense of Krifka et al (1995)) undergo a process of grammaticalization. This provides a new independent formal argument for kindreference and characterizing (sentential) genericity being distinct in the grammar of natural languages.

Such insights provide further independent evidence to the arguments made elsewhere that characterizing (sentential) genericity (including habituality as its special case) is not only orthogonal to both imperfective and perfective aspect (see Boneh and Doron (2010)), but also is best viewed as a category in its own right, independent of other categories of TMA systems (see e.g., Carlson 1977, Krifka et al. 1995, Pelletier and Asher 1997, Filip and Carlson 1997, Filip 2009, among others). Moreover, it may take us further in our understanding of genericity, if we shift our attention to languages that have formally marked (characterizing sentential) genericity,

rather than focusing on the question why in languages like English generic sentences (e.g., Birds fly) may be devoid of any overt (tense-aspect) marking (pace Dahl 1995). This research strategy is also in line with the work in genericity (see e.g., Pelletier 2010, Boneh and Doron 2010, and references therein) that aims at identifying different patterns in the expression of genericity, what kind of ontological commitments they entail, and what they reveal about the sort of knowledge that we use in everyday reasoning. The semantic properties of markers of characterizing (sentential) genericity, indicating that they encode weak descriptive generalizations, also raise the fundamental question about whether a single unified analysis for all characterizing generics is possible, which has been discussed since Carlson (1995).

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The development of invariant *be* in African American English

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Conceição Cunha
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At the center of the present inquiry lies the historical development of the habitual and generic markers of African American English (AAE) together with the way they behave in the structure, meaning and prosody of the variety from a diachronic point of view. We focus on investigating habitual *be* (and we compare it somewhat in the process to the development of the more widely studied form *used to*, which is also available in Mainstream American English, MAE). We draw primarily on historical materials in this talk, viz. the so-called slave recordings, i.e. sources stemming from the 1930s and 1940s featuring elderly speakers at the time. Subsequently, we compare these sources to recent interviews.

The rich aspectual system of AAE has been noticed several times (cf. e.g. Green 1998 for some of the major combinatorial possibilities). We capitalize here on the fact that AAE is a dual-component variety which incorporates (as a proper subset) the aspectual system of MAE, but at the same time shows a number of specialized markers, viz. in addition to the better known standard items (cf., e.g., Labov 1998 on the view). Capitalizing on the relatively broad range of (relevant) markers allows us to observe the interaction between other aspectual forms and the two respective candidates for habituality - e.g. *be* vs *used to*, which display certain telling differences with respect to their scopal properties.

We raise two major questions with respect to the phonological and syntacticosemantic properties of invariant *be* with respect to its diachronic development. First, while a number of factors are known about the remote-past marker *bin* and the perfect marker *done* (e.g. the former is claimed to obligatorily bear stress today, while the latter is claimed to mandatorily avoid it, i.e. contrary to the way *done* has developed in creole varieties), the properties of habitual *be* appear as elusive in the literature and not less so from the historical perspective on which we focus in this talk (cf. Cunha, Gergel & Ferguson forth. for the synchronic phonology of AAE auxiliaries).

We propose that stress assignment is not fixed on habitual invariant *be*, but that it can be deduced from its diachronic development. More specifically, we follow the hypothesis that - in terms of structure and meaning - a key developmental component in the raise of *be* was the co-occurrence with modals, which could be not only reduced, but altogether silent in the variety. (Compare the modal *would* in MAE on its habitual meanings.) The diachronic extension we investigate is how *be* came to be used in a variety of contexts beyond those allowing a habitual *would*. The prediction we investigate is that the silent-auxiliary hypothesis for the historical data correlates with the flexible stress properties of the emerging marker.

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Habituality, iterativity and continuativity in Shumcho

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The language of Shumcho is a small, endangered and hitherto un(der)documented West Himalayish (Tibeto-Burman) language spoken in a handful of villages in the district Kinnaur of Himachal Pradesh in the Indian Himalayas. Although the language had been detected by Western explorers in the early 19th century, systematic research began only in most recent times (see e.g. Huber 2009, 2011, 2013). Based on my fieldwork (ongoing since 2002), I will present a descriptive account of the expression of progressive, habitual, repeated, iterative or continuous action in Shumcho as emerging from the currently available data. I will discuss possible diachronic developments and effects with different verb types, and consider the role of the non-mirative and mirative, resp., copulas *to* and *taš*, 'be'.

Shumcho has a number of means for expressing progressive, habitual, repeated, iterative or continuous action. Progressive constructions feature a marker *-u* on the lexical verb and a copula, see (1a). A marker *-u* is also found in continuative constructions such as (1b). Habitual constructions such as (1c) involve the imperfective marker *-i* (see 1d) and a copula.

(1)	a.	rinku:	len	la-u	Taš	'Rinku is working.'
		R.	work	do-PROG	be.MIR.PRES.3	
	b.	rinku:	len	la-u-o	pos-min	'Rinku (had) kept on working.'
		R.	work	do-?-EMPH	sit-PERF	
	c.	rinku:	len	la-i	Taš	'Rinku usually works.'
		R.	work	do-IMPF	be.MIR.PRES.3	

Apart from using adverbs such as *gop phe:ra:* "many times" or *he:(-li)* "again", repeated action can also be expressed by repeating the converbial verb form in a converb construction:

(2) ni:la: ti gja-u gja-u bjai tš^{h}op la-ro-Ø
N. water fill-CONV fill-CONV thin soup do-FUT-3NHON
'By adding (lit. filling in) water again and again, Nila will make a thin soup.'

Unlike many other languages, however, reduplication or habitual, iterative etc. constructions cannot serve to express pluractionality, which in Shumcho requires a separate marker (see Huber 2014).

The fact that the elements involved in the expression of progressivity, continuativity and habituality in (1) are also found in other constructions raises questions of grammaticalization. Thus, the continuative construction in (1b) appears to have evolved from a converb construction (3a) whose main verb, the stative verb *pos-ma* 'sit, live, stay', developed into an auxiliary, and the emphatic marker *-o* (otherwise: focus, 'only') became a (quasi-obligatory) additional feature:

(3) a. rinku: len la-u pos-min 'Rinku (had) sat/stayed by working'
R. work do-CONV sit-PERF
=> b. rinku: len la-u-o pos-min 'Rinku (had) kept on working'
R. work do-?-EMPH AUX-PERF

This makes continuative constructions look similar to progressive constructions such as (1a), which also feature an imperfective marker *-u* ("progressive") on the lexical verb but require the presence of a copula verb. The fact that /u/ also serves as a perfective or past marker when not followed by an auxiliary or copula verb, as in (4), suggests that there are two distinct markers surfacing as *-u*, which has consequences also for the broader analysis of converb constructions.

(4) rinku:-s len la-u (*COP) 'Rinku worked'
R.-ERG work do-PERF (*was working, *kept on working, etc.)

The imperfective marker *-i* is also found outside habitual constructions, then expressing a general property of the subject or used as a future, see (5b).

(5) a. rinku: len la-i Taš 'Rinku usually works.'
R. work do-IMPF be.MIR.PRES.3
b. rinku: len la-i i) 'Rinku works.'; ii) 'Rinku will work'
R. work do-IMPF

I will argue that diachronically, constructions such as those in (5) are derived from an imperfective participle where *-i* functions as an imperfective nominalizer and suggest that interpretative differences have to do with the evidential properties of the copulas *to* and *taš*, (both) 'be'.

(6) len la-i mi: 'working person'
work do-IMPF(Nom) person

Based on the emerging picture I will outline some consequences for the development of the Shumcho TAM-marking system.

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Somebody that I used to know, or: How do habitual verbal heads emerge? The case of German *pflegen* 'use(d) to'

Lukasz Jedrzejowski (Universität Potsdam, Institut für Germanistik)
Lisa Wietholz (Universität Potsdam, Institut für Germanistik)

Introduction. In this talk, we will examine emergence circumstances and the development of the habitual verbal head *pflegen* (lit. 'maintain') 'use(d) to' in the history of German and show that *pflegen* grammaticalized into a functional head in the transition from OHG (750-1050) to MHG (1050-1350). We will provide diachronic evidence showing that *pflegen* in its habitual usage (i) emerged out of the pattern *pflegen* + DP and (ii) requires a Hab operator restricting the domain of quantification.

Phenomenon. In Modern German (1900 -) the predicate *pflegen* can be used in two different ways. It can select either for DPs marked for the Accusative case (cf. [1]) or for infinitive complements headed by the infinitival marker *zu* 'to', as exemplified in [2]:

[1] *Sie* *pflegen* [$_{DP}$ *die* *Tradition* [*der* *Zunft*]]
they maintain.3PL the tradition of.the craft

'They cultivate the tradition of the craft.'
(DeReKo, *Rhein-Zeitung*, 8/2/2013)

[2] *Bilbaos Parks und Gärten sind nun so grün, weil* [INF *in Spaniens*
es
Bilbao's parks and gardens be.3PL now so green because it in Spain's

viertgrößter Stadt ausgiebig *(*zu*) *regnen pflegt*]
fourth.biggest city extensively to rain.INF use.3SG

'Bilbao's parks and gardens are now so green because it has been raining extensively in the fourth largest city in Spain.' (DeReKo, *Frankfurter Rundschau*, 4/12/1999)

Analysis. To begin with, we will outline the basic properties of *pflegen* used as a Hab-head in Modern German. In brief, we assume *pflegen* to be a Hab-head merging in AspP between VP and CP, which requires a Hab operator binding the event variable and presupposing the plurality of events quantified over (cf. Boneh and Doron 2012). Contrary to Colomo (2011), we argue that a Gen operator cannot restrict the quantification domain of *pflegen*. Arguments provided for this view come from: (i) different kinds of quantification of events, (ii) the (in)compatibility with punctual adverbial modifications, and (iii) scope relationships between Gen and Hab. Syntactically, we analyze *pflegen* as a subject-to-subject raising predicate allowing embedding of weather predicates like *regnen* 'rain' (cf. [2]) and triggering an A-movement of the embedded subject into the matrix subject position. As the TP layer is supposed to be absent in German (cf. Haider 2009), we claim that the raised subject occupies [Spec-AspP] as its target. The structural high of AspP, in turn, imposes syntactic restrictions on dependent infinitives disallowing extraposition and, simultaneously, gives rise to restructuring effects, e. g. to the IPP-effect in older stages of German (cf. Hinterhölzl 2009). Diachronically, we shall illustrate that the pattern *pflegen* + infinitive occurred already in early MHG and that its compositional meaning has remained unchanged until today. We can reanalyze the grammaticalization of *pflegen* as follows

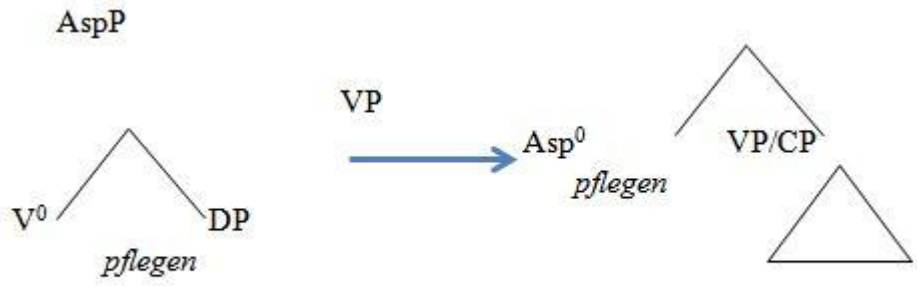

Figure 1: The grammaticalization of *pflegen*

and assume two different lexicon entries:

a. *pflegen* + DP -> [[*pflegen*]] = λ*x*λ*y* [pflegen'(*x*,*y*)]
b. *pflegen* + infinitive = ΦHab -> λPλ*s*λw [INIT (P,s,w) & ∀w'∈$MB_{\tau(s),w}$ ∃e [τ(s) ⊆ τ(e) & ITER (P,e,w')]] (based on Boneh & Doron 2008, 2012)

When employed as a transitive lexical V-head, *pflegen* is a two-place predicate quantifying over a set of objects (cf. [1]). We will show that embedded DPs could be marked for the Genitive, Dative and Accusative case in older stages and that only Accusative prevailed. Having undergone a grammaticalization process, *pflegen* became one-place subject-to-subject raising predicate. Following the Late Merge Principle (merge as late as possible) proposed in van Gelderen (2004), *pflegen* merges higher in the structure, i. e. in AspP, extending its quantification domain to events. Here, we will illustrate that the propositional argument could be realized in two different ways: either as a consecutive clause headed by the complementizer *dass* 'that' and with a silent correlate *so* 'so' (= CP) or as an infinitive (= VP). With regard to the first strategy, we will show that finite *dass*-clauses disappeared from the use in late ENHG (1600-1700). As for the latter, we will outline how bare infinitives suppressed their counterparts headed by the infinitival marker *zu* 'to'. The following example with a bare infinitive from the 19th century illustrates that this process was completed first in the 20th century:

[3]	*Die*	*Leitung*	*solcher*	*Arbeiten*	*haben*	*französische*	*Genieoffiziere,*	*wodurch*
	the	leadership	of.such	works	have.3PL	French	genius.officers	by.what

dieselben	*weit*	*rascher*	*gefördert*	*werden,*	*als*	*sonst*	*dergleichen*	*hier*
the.same	far	quicker	sponsor.PTCP	PASS.AUX.INF	than	usually	of.that.kind	here

[$_{INF}$ *geschehen* *pflegt*] (DeReKo, KHZ, *Mainzer Journal*, 13/10/1849))
happen.INF use.3SG

'French genius officers are leading such works, whereby they are sponsored quicker than it usually happens.'

Conclusion. As it turns out, *pflegen*'s development provides new insights into how functional heads develop in general. It clearly demonstrates, contrary to what Traugott (1997) claims, that subject raising verbs embedding infinitives can emerge out of the pattern *predicate* + DP and that a control structure as a linking bridge is not required for this development at all.

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Habitual and avertive: one polysemy pattern in Moksha

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The study focuses on diachronical relations of two very distinct functions of one verbal affix, which is tradionally called Habitual, in Moksha Mordvin (< Finno-Ugric < Uralic). Apart of habituality, it can sometimes have a totally different meaning, namely avertive (P was about to occur but did not', cf. Kuteva 1998). The data are based on our own fieldwork.

Its interpretation depends on its interaction with another verbal derivational category, namely Imperfective. The last one has a wide range of meanings — including progressivity, different kinds of pluractionality and habituality itself. In the last case Imperfective marking is obligatory, so each verb must have an Imperfective correlate, choosing only one from three possible allomorphs:

Most often, -kšn'-, the affix under the scope of this study, is attached after an Imperfective marker. Such uses of -kšn'- narrow range of possible meanings of a verb, excluding everything except habituality:

(1) mašina-n'əkə s'id'əstə lotk-s'-i
car-1PL often stop-IPFV-PRS.3SG
'Our car often stops { during our current trip / every day in this place }'

(2) mašina-n'əkə s'id'əstə lotk-s'ə-kšn'-i
car-1PL often stop-IPFV-HAB-PRS.3SG
'Our car often stops { *during our current trip / ^{ok} every day in this place }'

Some morphologically complex or loan stems use -kšn'- as an imperfective marker (3). In that cases it can have all the interpretations that Imperfective usually can have; futhermore, such stems regularily attach -kšn'- (carrying the 'pure habitual' meaning, as in (2)) for the second time (4).

(3) šis' šobdə-l-gət-kšn'-i
day-DEF dark-VBZ-INCH-HAB-PRS.3SG
'It is getting dark.'

(4) t'ɛn'i š'i-s' ranajstə šobdə-l-gət-kšn'ə-kšn'-i
now day-DEF dark-VBZ-INCH-HAB-HAB-PRS.3SG
'It gets dark early now.'

Finally, when modifying telic stems, it can obtain avertive meaning ('P was about to occur but did not', cf. Kuteva 1998). This use of -kšn'- is for clear reasons restricted to past tense forms.

(5) maša pra-kšn'-əs'
'Maša almost fell.'

The three functions of -kšn'- are related diachronically. The spread of -kšn'- from purely habitual to other Imperfective context is presumably connected with grammaticalization of Imperfective: Moksha seems to have created a new Imperfective subparadigm from four

etymologically unrelated affixes with close meaning, using the most productive of them, -kšn'-, for the stems which were in a sense 'weird' (morphologically complex, loan etc.).

The coexistence of both habitual and avertive meanings in one and the same affix presents a greater problem. We will argue that the intermediate notion linking them is the notion of prospective -- 'X is about to do P'. It is by no means typologically rare for past prospective to evolve in an avertive gram: the step from 'X was about to do P' to 'X almost did P (but not actually) is due to conventionalization of a scalar implicature.

The connection between prospectivity and habituality resembles that which links the last one and future (Haspelmath 1998, Tatevosov 2005). Remaining still somewhat mysterious, it possibly has pragmatic nature, too. In the talk we are going to present a more thorough analysis of this based on data of some Moksha dialects as well as closely genetically related language Erzya.

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Non-cladistic approaches to language genealogy

Language Discontinua: how Bilingual-Led Differentiation Disrupts Cladistic Modeling

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Luisa Miceli (University of Western Australia)

In this presentation we explore the impact of character differentiation on subgrouping within a language family. We are particularly interested in bilingual-led character differentiation – a diachronic process which results from an observed bias against the use of shared characters on the part of bilingual speakers. A full discussion of this bias and its diachronic consequences can be found in a forthcoming paper by the authors (Ellison & Miceli, in prep.). Here we consider the impact of its occurrence on subgrouping specifically. We argue that differentiation

between two languages can result in significant levels of shared innovation within overlapping subsets of the family. In a simple case, the outcome resembles that of change in a language continuum situation. A complex case, where a large network of differentiations is involved, may result in a pattern like the London underground map of isoglosses seen in Indo-European (see François, 2015 for a summary of models for language classification).

Consider an unknown parent language which gives rise to a number of child languages. If each of the child languages develops independently, its retentions do not depend on any property of another language but simply on the retention rates in the history of that language. In a simple model of change, we can assume a constant retention rate r across time – this is the chance of retaining a particular form in the language for the character (e.g. phonemic realization of a lexical item) across unit time. A second parameter c to the model is the usually small probability of a particular form being introduced into the language, for that meaning, by chance. Where two languages undergo heavy contact, differentiation is a possibility. Differentiation is modeled by a further bias parameter b which magnifies the rate of form loss only where both languages have the same form. On the basis of experimental evidence, we use values that lower the retention rate by approximately 5%. These parameters allow us to define a Markov chain model of the loss of characters in independent child languages, and also in pairs of languages that are undergoing bilingual-led differentiation. The unit time retention/loss matrices are shown in Fig. 1.

(a) Input:	**f**	**n**
Output: f	*r*	*1-c*
n	*1-r*	*c*

(b) Input:	**f f**	**f n**	**n f**	**n n**
Output: f f	*r r – 2 b r (1-r)*	*r (1-c)*	*(1-c) r*	*(1-c) (1-c)*
f n	*b r (1-r)*	*r c*	*c r*	*c (1-c)*
n f	*b (1-r) r*	*(1-r) (1-c)*	*(1-c) (1-r)*	*(1-c) c*
n n	*(1-r) (1-r)*	*(1-r) c*	*c (1-r)*	*c c*

Figure 1: Matrices for instantaneous rates of (a) independent child language retention and (b) paired retention with differentiation. The form to be retained is *f* and the lack of this form is indicated by *n*. Each column is a distribution over outputs given the input situations at the top of the column

Using the expm library in R, we simulated a continuous time course for languages in isolation as well as interacting under these assumptions. Three languages A, B and C were involved in the scenario, our interest being the probability of finding a character present in exactly two of the languages. The results of the simulation are shown in Fig. 2.

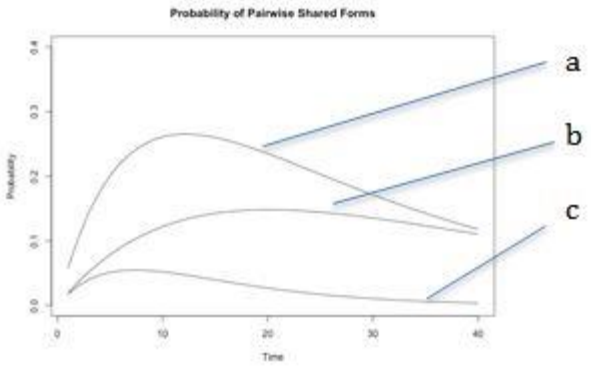

Fig. 2: Joint retention probability of a cognate pair across a) 2 out of 3 independent child languages, b) an independent child language and one of two languages engaged in pairwise differentiation, and c) two languages undergoing differentiation excluding a third independent language. The graphs start low, because the probability of retaining a form in only 2 out of 3 languages is in initially small, as the third language is as yet unlikely to have replaced it.

If all 3 languages develop from the parent independently, then we find the higher rate of 2-language cognacy shown as (a) in Figure 2. This rate is approximately the same between all languages, and character presence is randomly distributed among the child languages, so the impetus for subgrouping is low – the natural interpretation is to ascribe all characters to the common parent.

In line (b) we see the probability of common retentions between one language, A or B, participating in differentiation (A vs B) and an independent sibling language C. Over time, this approaches the rate of pairwise retention found in independent languages. More importantly, however, for most of the history shown, this pairwise rate is much higher than that found between languages differentiating from each other. Their (A-B) pairwise retention is shown in plot (c), and is at a much lower rate.

In this model, we only consider forms retained in exactly two languages. This means that their presence can be interpreted as either a common inheritance or a shared innovation in a subgroup. In Fig. 2b, we see that language pairs A-C and B-C both have much higher rates of pairwise cognacy than A-B (2c), which suggests that there is either an A-C subgroup or a B-C subgroup, or overlapping subgroups. Overlapping subgroups based on shared innovations are a problem to reconcile with traditional arboreal cladistic models. Allowing wave models, or reentrant trees, in the explanation of the language family does model the shared innovations. However, it is not the only explanation of the data. The correct explanation, from which the cognacy rates were generated, is one in which languages undergo differentiation.

Discussion of the simulations will be followed by relevant case studies of lexical data.

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Subgrouping without trees: Why we need non-cladistic approaches to language genealogy

Alexandre François (CNRS–LaCiTO, ANU)
Siva Kalyan (Australian National University)

Ever since it was popularised by August Schleicher (1853, 1873), the family-tree model has been the dominant paradigm for representing the historical relations among the languages in a family. However, the advantages of the tree model come at the cost of making a very restrictive assumption: namely, that language families evolve primarily by splitting, with subsequent loss of contact. Put another way, the tree model assumes that once two speech varieties have started to diverge, it is no longer possible for innovations to diffuse from one to the other. This assumption excludes the possibility of overlapping subgroups.

Yet it is well-known that in a dialect network, innovations can diffuse between speech varieties that have already diverged from each other (Saussure 1916, Bloomfield 1933). Furthermore, many language families are known to have arisen through the gradual breakup of a dialect network. In such language families—which Ross (1988: 8) calls *linkages*—innovations diffuse in intersecting patterns, leading naturally to the formation of overlapping subgroups. In a linkage, the assumptions of the tree model are not satisfied, and any cladistic representation is necessarily inadequate (Heggarty et al. 2010, François 2014, Kalyan & François f/c). There is thus a great need for rigorous studies of linkages that follow the essential principles of the Comparative Method, yet do not presuppose the validity of cladistic approaches. Such work is capable of yielding insights about linguistic and social history.

We also need to develop new ways of representing language genealogy, which dispense with the shortcomings of the tree model, while preserving its strengths. Many proposals have been made in the literature (e.g. Anttila 1972; Hock 1991; Bryant et al. 2005; Nakhleh et al. 2005; Kalyan & François f/c), yet so far there is no widely accepted, satisfactory solution. More discussion would be welcome among historical linguists, to achieve consensus on the best methodology (or methodologies) to represent linguistic subgroups when they intersect. Finally, any proposed non-cladistic representation of genealogy will raise the question of how to interpret it in historical terms. Addressing this requires theoretical discussion of the social conditions and mechanisms of language change that lead to the development of a linkage (see Ross 1997, François 2011, 2014).

Non-cladistic approaches to language genealogy are still in their infancy, and still need to be developed. We hope that this workshop serves to spur further research into this hitherto-neglected, but fundamentally important area.

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Automatic Detection of Linkages and Innovation-Defined Subgroups

Harald Hammarström (MPI Nijmegen)

Darden and Olson (1999), François (2014), Kalyan and François (2013), Ross (1997) highlighted the incompleteness of the tree model to different kinds of language diversificiation. In essence, the tree model captures only i) innovation-defined subgroups that correspond to a speech communities that separate historically and accumulate separate innovations, while the real world also prominently features ii) linkages that correspond to speech communities that gradually separate and accumulate innovations that *overlap* around the areas not yet separated. However, a formal definition of an innovation-defined subgroup vs linkage is still lacking, wherefore we propose one here. Formally, assume we are given a set of languages L and a list of character innovations I, e.g.

	L_1	L_2	L_3	L_4
Innovation1	X	X	X	
Innovation2		X		X
Innovation3	X			
Innovation4	X		X	X

The task is to quantitatively define, given L and I, when an innovation defined subgroup $\subset L$ and when a linkage $\subset L$ is to be inferred. (Note that the problem statement starts from data that is already assumed to represent innovations – the question of how to heuristically distinguish retentions/innovations in raw data can also be done algorithmically, but that question falls outside the scope of the present contribution.)

To quantify whether a subset group $S \subset L$ is an innovation-defined subgroup we may apply a Fisher Exact Test (Fisher 1922) how well each innovation in I "selects" S and compare this to what would be expected at random for a subset of size S. In essence, this will favour the S that has the highest amount of supportive isoglosses and the least amount of conflicting isoglosses.

To quantify whether a subset chain C comprising languages $\subset L$ is a linkage we may similarly apply a Fisher Exact Test (Fisher 1922) how well each innovation in I "selects" C and compare this to what would be expected at random for a chain of size C. A chain is defined as an ordered list of passages and locks. Isoglosses can be said to support a given chain to the extent that isoglosses span a range of the list up to and including a lock, but isoglosses opposite passages of a lock do not exclusively share innovations.

With the Fisher Exact Test-based calculations we get p-values that can be compared across different sizes of subgroups and different types of subsets (chains and subgroups) and the null-hypothesis that there is no subgroup or linkage in evidence.

The appropriateness of entire calculation assumes that i) innovations are atomic, ii) innovations are independent, iii) innovations are of equal weight, and that iv) a (specific kind of) parsimonious account of divergence is preferred. The calculations have no human interventions or thresholds whatsoever and will be illustrated on a subset of well-known Indo-European character isoglosses.

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Splits, Shared Innovations … and the Real World.Overcoming the Tree Model Distortion of Language (Pre)Histories

Paul Heggarty (Max Planck Institute for Evolutionary Anthropology, Leipzig)

From its earliest days, historical/comparative linguistics has been dominated, even obsessed, by the branching tree model of language divergence. More than two centuries on, we still have no agreed tree even for the best studied of all language families, such as Romance and Indo-European. Even more disheartening is that historical linguists are still presuming and looking for one at all.

Revolution, however, may at last be in the air. Among a rush of new quantitative approaches to language classification, most notable is a batch of sophisticated algorithms for phylogenetic analysis. These aspire to inform us on language (pre)histories, too, through methods dubbed phylo-chronology and phylo-geography. As those names all suggest, however, initially it seemed as though the old tree fetish remained alive and well, elevated even into a fundamental methodological presumption. That Ringe *et al.* (2002) failed to find a "perfect

phylogeny" for Indo-European, however, came as no surprise, of course. Human populations do not live and relate to each other in uniquely binary branching relationships — so what logic is there in presuming that their languages should?

More flexible and promising, however, are approaches within a Bayesian analytical framework, explicitly devised to accommodate degrees of phylogenetic uncertainty and conflicting signal, and indeed to measure that in the form of "posterior probability" ratings on any given node (often well below 100%, or indeed even below 50%). These methods return no single tree, but summarise phylogenetic conflicts into only a "consensus tree" (Gray & Atkinson 2003), or indeed the now preferable "maximum clade credibility tree" (Bouckaert *et al*. 2012).

Some results can still appear to be as much a distortion of known language histories as progress in clarifying and extending them (see Chang *et al*. forthcoming). But provided that modelling proceeds on an explicit realisation of the abstraction and idealisation that is any tree presumption, Bayesian models in particular are open to refinements to bring them progressively closer to a more faithful model of how languages actually diverge — often in ways that are decidedly not tree-like — in the real world. This talk explores some such corrections and refinements that should open up real prospects for progress, focusing on Indo-European and some of its sub-families (**Heggarty** 2014**).**

The wild goose chase for a single true tree per family has dogged historical linguistics for two centuries too long. At last, new methods and greater realism may finally allow us to lay to rest this interminable embarrassment for our discipline.

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The structure of the Indo-European linkage

Siva Kalyan (Australian National University)
Alexandre François (CNRS–LaCiTO, ANU)

A central tenet of the Comparative Method is the principle of subgrouping by shared innovations. If two or more languages share a set of developments which are not found elsewhere in the family, then it is concluded that these languages all descend from a uniquely-shared proto-language, and that they thus form a subgroup. It is usually expected that the subgroups in a language family form a nested pattern, and that the history of the language family can thus be represented with a tree diagram.

However, there are many cases where shared innovations (and hence sub-groups) do not form a nesting pattern, but rather intersect, forming chains or networks. In particular, this is what we find in the case of language families that evolve out of dialect networks (what Ross 1988:8 calls a linkage). In such cases, the family-tree model is inadequate as a representation of language history.

Kalyan and François (forthc.; see also François 2014) proposed a new computa-tional method, Historical Glottometry, for analysing and representing linkage situations. This method differs from the computational methods that are typically used for subgrouping, in that all of the following conditions are satisfied:

1. Each subgroup is posited on the basis of a set of shared innovations;
2. A subgroup may be "stronger" or "weaker" (as a function of how many innovations confirm or disconfirm the grouping);
3. Subgroups may overlap.

This talk presents an application of Historical Glottometry to the higher-order subgrouping of Indo-European, a language family which has long been recognised as having evolved out of a dialect network (Schmidt 1872; Meillet 1903; Bonfante 1931; Porzig 1954; Garrett 2006). The glottometric analysis is based on a dataset consisting of the 384 innovations shared across Indo-European branches that are listed in Porzig (1954).

This systematic investigation of patterns of shared innovation leads to some unexpected results. For example, not only is there strong evidence for an Italo-Celtic subgroup; there is even stronger evidence for an Italo-Germanic subgroup—and these two subgroups exist simultaneously. Furthermore, it can be shown that the major Indo-European languages (with the exception of Hittite and Tocharian) fall into two "diffusion areas" (see Figure 1), showing a rough east-west split, yet following a hitherto-undescribed pattern.

Keywords: Wave Model, Comparative Method, Indo-European, subgrouping, Historical Glottometry

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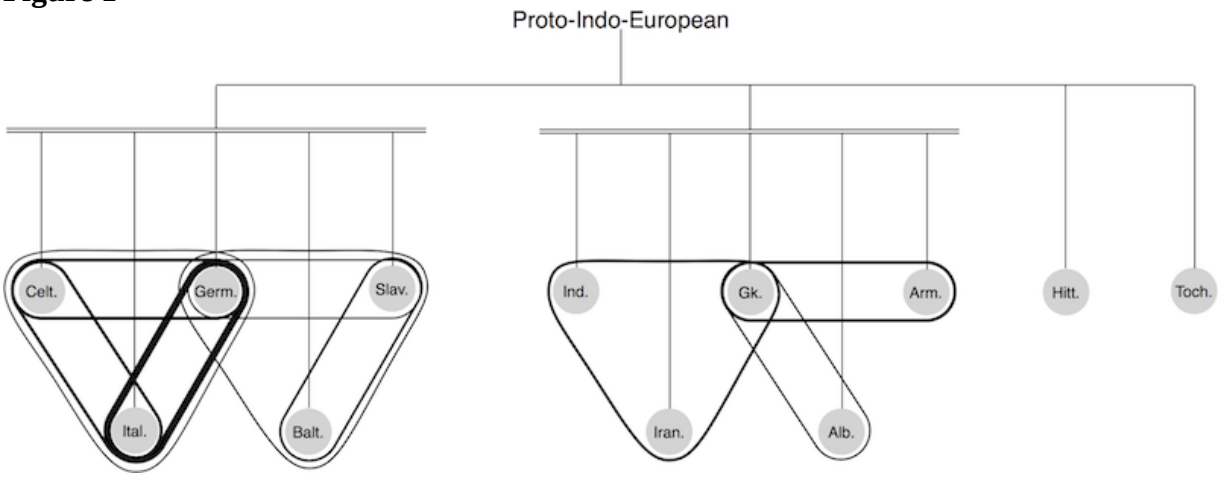
Figure 1



Lateral transfer on phylogenetic trees

Luke Kelly (University of Oxford)

Bayesian phylogenetic methods for inferring the phylogeny of lexical traits based on vertical inheritance, while promising, are prone to errors and inconsistencies when the data-generating mechanism includes lateral transfer. For example, the credible intervals quoted for divergence times are in conflict with those obtained for certain key branching events (Gray and Atkinson, 2003; Nicholls and Gray, 2008). Previous approaches have required the removal of traits which are known to have been borrowed. This does not address the problem of unidentified borrowing however. To address this model misspecification, we describe and fit a phylogenetic model for the diversification of lexical traits which explicitly incorporates lateral transfer.

We take the the binary stochastic Dollo model (Nicholls and Gray, 2008; Ryder and Nicholls, 2011) as our starting block and extend it to allow for the lateral transfer of traits between lineages of a phylogenetic tree. The model differs from those of Nakhleh et al. (2005) and Szöllősi et al. (2012) in that it does not induce a graph structure or require modifications to the tree as we integrate over all possible trait-borrowing times and locations. To fit the model we use standard Markov chain Monte Carlo methods for phylogenetic trees and re-analyse a number of well-studied datasets such as Ringe et al. (2003) and Kitchen et al. (2009).

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Isoglosses and subdivisions of Iranian

Agnes Korn (Universität Frankfurt a.M., University of Cambridge)

As a language family with some 3000 years of documentation, and spread over a vast territory, the Iranian branch of Indo-European is a fortunate case for testing hypotheses and methods of relations aqmong related languages. Conversely, while there is a large number of Ir. languages, Persian is the only member of the family that is attested in Old, Middle and New Iranian (one of the IE languages with the longest attested history) while all others are only attested in one of the three periods. In addition to the difficulties involved here, there is the interesting question of calculating the contribution of the languages that died out.

Another perspective is provided by the large bodies of new data which have come to light both of contemporary and of historical Ir. languages. The latest arrivals include Bactrian, the language of the Kushan empire. In spite of its historical importance, it was known until 1990 only from coins and a few stone inscriptions (1st-3rd c. AD) that proved difficult to read and to understand. In the intervening years, a corpus of some 150 manuscripts (letters, contracts etc., 4th-9th c.) has come to light and is available for study now.

So far as research of the relations among Ir. languages is concerned, the new data have not been integrated yet. Also, the methodology has remained essentially unchanged, and those works that do address the issue make use of essentially the same set of isoglosses as 100 years ago. These isoglosses are not only outdated, but also problematic from the outset because they were established for other purposes (e.g. the differentiation of various Ir. “dialects” present in the Manichean manuscripts found in Chinese Turkestan at the beginning of the 20th c.). A fresh look, and a new collection of features, is thus urgently needed.

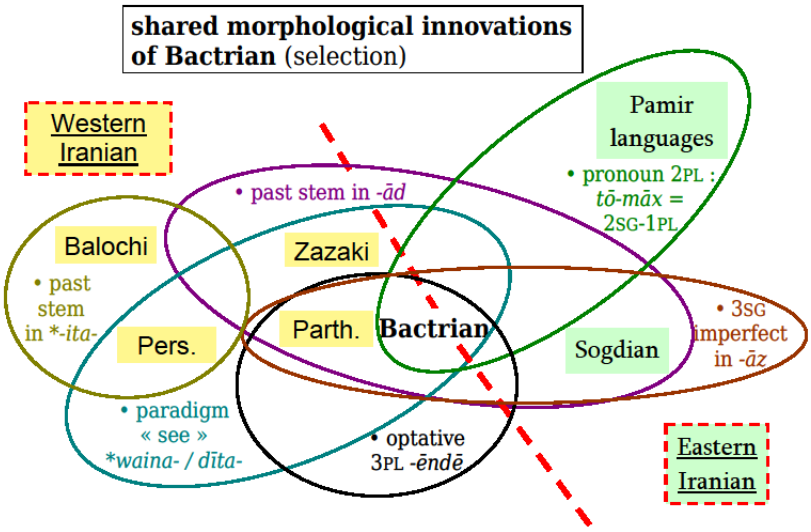
Taking the morphological innovations of Bactrian as an example, unexplored for purposes of language grouping so far, a complex pattern of their being shared by other Ir. languages emerges (**Fig. 1**). Noteworthily, the features cross the dichotomy of Eastern and Western Iranian, which has been the very basis of Ir. dialectology, and reveals a particularly close relation with Parthian.

Likewise remarkably, the picture shown by these features of Bactrian is not without similarities to the findings on isoglosses of other language families, and is in fact quite similar e.g. to the result obtained for of Oceanic languages by Alexandre François (**Fig. 2**), promising

fruitful perspectives for an exchange of research results on various language families.

At the same time, it seems to me that one does not necessarily need to stop here: Ir. data allow for study of the diachronic perspective, which in turn permits evaluations that are necessarily impossible in the case of many other language families. The paper will thus "attack" the picture presented in **Fig. 1** and discuss how it changes when adding aspects such as archaism vs. innovation (NB that the two sides of an isogloss i.e. the absence vs. presence of a feature may carry entirely different implications for language groupings), relative chronology, and the possible impact of neighbouring languages within and outside the group (which in the case of

Fig. 1: Some morphological isoglosses of Iranian
(Bactrian data from SIMS-WILLIAMS 2004)



Iranian are mostly quite well documented).

Fig. 2: Isoglosses of a group of
Oceanic languages (FRANÇOIS 2014: 183)

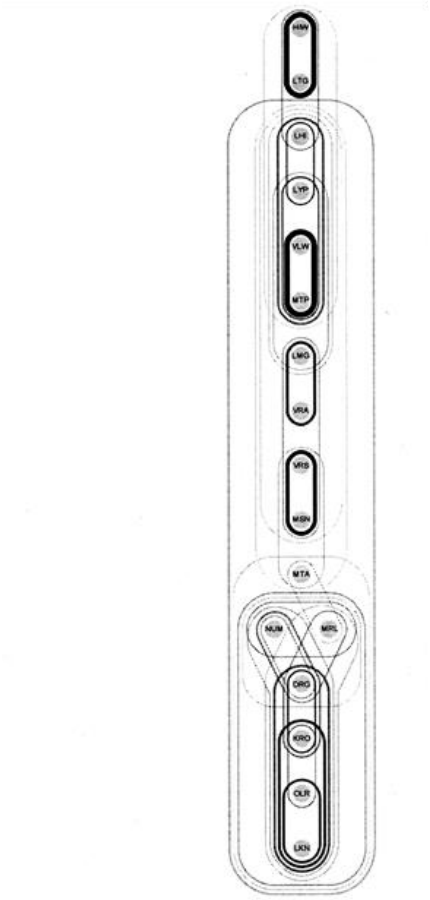


Figure 6.5 A glottometric diagram of the Torres–Banks languages

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Sharing innovations across branches: A case study of the Tani subgroup of Trans-Himalayan (Tibeto-Burman)

Mark W. Post (University of New England)

The Tani branch of Trans-Himalayan (Tibeto-Burman) was convincingly established by Tian-Shin Jackson Sun in 1993, on the strength of a large number of cognates, regular phonological correspondences, and around 500 reconstructed lexical roots. Sun's Tani subgrouping proposal then bifurcated the family into "Eastern" and "Western" branches, which mainly included languages found in the Siang and Subansiri-Kameng river areas respectively. Sun's primary criteria for this bifurcation were a set of four phonological isoglosses, supported by around twenty-five differentially-retained lexical roots. Subsequent research has focused on two areas: (1) identification of larger numbers of phonological isoglosses for a larger number of Tani languages, and (2) assessment of "problem cases", being languages which do not align perfectly with either of the Eastern or Western groups according to Sun's criteria.

The results are as follows: although Sun's Proto-Tani reconstruction appears to remain valid in that it is supported by data from all known Tani languages, the overwhelming majority of Tani phonological innovations which have been identified - including Sun's original four - identify distinct sets of languages with at best partial obedience to Sun's primary Eastern/Western split. In other words, all identified phonological innovations cross at least one branch which is established by another innovation. The implication is that it may be simply impossible to subgroup Tani languages on a strictly genealogical basis. Instead, what we find is a network of innovations spreading areally across languages both mutually intelligible and not - a counterintuitive but entirely plausible outcome given the facts of widespread multilingualism and population exchanges throughout the Tani region. An adequate "classification" of the Tani languages, therefore, might be best represented as a schematic of areal clusters, diffusion zones, and their boundaries - a forest rather than a tree.

A glottometric approach to Semitic subclassification

Robert R. Ratcliffe (Tokyo University of Foreign Studies)

The position of Arabic within Semitic is somewhat controversial. Traditionally Arabic has been classified as Southwest Semitic in the same group with Geez, Epigraphic South Arabian, Modern South Arabian and other Semitic languages of Ethiopa. Hetzron (1976) proposed an alternative classification, whereby Arabic is treated as part of a Central Semitic grouping which includes Hebrew and Aramaic. This view has been widely embraced by many Semiticists.

In the present communication I intend to apply to this controversy the method of glottometric analysis whose application to Arabic dialects formed the subject of my previous presentation to this conference. The central idea is that the goal of a classfication should not be to select features which allow for the formation of a tree diagram, but rather to use linguistic features to try to determine the true migration and contact history of the group. This can be done by comparing the languages on the basis of a set of predetermined features (from phonology, morphology, lexicon and syntax) and quantifying the differences and similarities among the languages on the basis of these features. The conclusion from the study of Arabic dialects was that while some features could be used to a get an elegant tree model, this was not possible when all features were considered together. The total picture was more complicated, but also more consistent with the history of migration and contact within the group. The present communication extends this approach to Semitic as a whole, concluding that while morphological features alone can give a tree model consistent with Hetzron's thesis, the totality of features suggests a more complicated pattern involving interlanguage contacts.

Philippine linkages and the position of the northern Mindoro languages

Lawrence Reid (University of Hawai)

Blust (1991) lists nine different subgroups of Philippine languages, many of which have had cladistic trees drawn of their internal subgrouping relationships (Reid 1974, Hymes 1998, etc). While these groups have been distinguished primarily on the basis of their phonological innovations, some have also been shown to have innovations in their pronominal paradigms, function morphemes, verb derivational patterns and morphosyntax.

That these different subgroups are linkages that are the end result of the breakup of a dialect chain is obvious from a number of factors. First is the archaeological evidence of the rapid spread of Malay-Polynesian speakers, from Batanes to Western Oceanic within the space of a few hundred years, which must have left a trail of mutually intelligible speakers of closely related dialects from one end of the Philippines to the other, probably along relatively accessible river valleys and coastal plains (Blust 2005:40). Second is the geographic nature of the Philippines, ranging from high mountain ranges intersected by major river tributaries and wide areas of flat land, to small, island groups that contributed to communication breaks and dialect differentiation. Third was the intense intertribal conflict that existed, exacerbating the lack of communication between neighboring dialect groups.

Despite these factors, there is clear evidence of extensive trade between the groups, and intermarriage between them, with expected linguistic consequences of shared lexicon, and other features. While a cladistic tree shows the subgrouping relationships between the various groups, it obscures the rich interchange of lexicon and other linguistic features, and the factors that produced networks of languages, in the sense of Ross (1988:8).

There are said to be seven languages spoken in Mindoro, of which four (Blust's Southern Mangyan) are classified as part of his Greater Central Philippines subgroup. The northern three languages, Iraya, Alangan and Tadyawan have been grouped by Zorc (1974) as part of the Central Luzon group of languages based primarily on a set of forms which show *R > y. Some of these forms exist also in the southern group, which also shows some *R > y forms not found in the northern group Barbian (1977:75).

The northern languages also show a number of sound changes which are found also in geographically near languages of southern Luzon (Batangas Tagalog and Bikol) and the Visayan areas, the result of probably thousands of years of language contact between these areas. The phonological mismatches between proposed subgrouping relationships are compounded by the morphological and syntactic mismatches between these groups.

Recent fieldwork on Iraya has highlighted the problems of the cladistic approach in displaying the position of the northern Mindoro languages and their linguistic relationships. Genetic evidence (HUGO 2009:Table 1), as well as physical type, suggest that Iraya while not identifying as Negrito, are descendants of such an ancestral group that probably occupied all of Mindoro. They originally must have learned their language from one of the MP groups that have now taken over all areas of the island, leaving the Iraya only in the remote northern mountains. The influx of MP groups into Mindoro, has resulted in a linguistic situation in Iraya that defies adequate representation by a cladistic model.

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Detecting non-tree-like signal using multiple tree topologies

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The family-tree model has been the dominant model for representing the genealogical relations of languages. Historical linguists, however, have proposed a range of alternatives that capture the possibility that datasets harbour more than one evolutionary history (Heggarty et al. 2004). Such network methods model language relations in terms of distances, and do not restrict themselves to only consider features that have been evolving vertically along the branches of a phylogenetic tree. In the last decade, linguists have adopted computational methods to reconstruct phylogenetic trees as well as networks from evolutionary biology (Gray and Jordan 2000). This has fuelled debates on how linguistic change and genealogical relationships should be modelled (Gray et al. 2007). It seems that the family-tree model is appropriate for some families (Indo-European, which required only three contact events in the network by Nakhleh et al. 2005), while it is not appropriate for other families (Western Oceania, Ross 1988).

In this paper we present a phylogenetic tree reconstruction method that can estimate whether there is evidence for two or more tree topologies in a cognate-coded lexical dataset. This method is part of the phylogenetic reconstruction package *BayesPhylogenies* (Pagel and Meade 2004) and is implemented using Bayesian Markov Chain Monte Carlo (MCMC) methods. We applied this method to a range of lexical datasets, including Lee and Hasegawa's (2011) dataset of 59 Japonic languages, Ben Hamed and Wang's (2006) dataset of 24 Chinese languages, and Gray et al.'s (2007) dataset of 400 Austronesian languages.

The preliminary results that are available at this time suggest that different language groups display different support for multiple topologies and thus multiple evolutionary histories. We find that Sinitic and Japonic support two trees, the first accounting for 85% of the lexical data, and the second accounting for 15% of the lexical data. Austronesian supports only one topology. Further investigation may uncover affinities between languages supported in the second topology that would not emerge in a regular, single phylogenetic estimation. When we examine the multiple topologies, it is possible to go back to the dataset and see which Swadesh meanings support which phylogenetic tree. This allows us to find evidence of alternative evolutionary pathways, hidden borrowings, and differences in the evolutionary model suitable for different meanings. We conclude that this method is helpful in assessing the amount of non-tree-like signal in a lexical dataset and complements both tree and network estimation methods.

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Patterns and models of semantics change

 # Unfortunately, you are bello tall. When bleaching can't tell the whole story

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It has been argued that intensifiers often emerge via *bleaching,* the process whereby a content word loses its independent content to become a purely functional morpheme (Partington 1991, Lorenz 2002, Tagliamonte 2008, Ito and Tagliamonte 2003). Textbook examples of the process are English *very, well, awful,* where the intensifying meaning represents the end point of the trajectory, and supposedly bears little trace of the original lexical meaning. Yet, this view has been challenged by formal semanticists on the ground that bleaching is better understood as a change in semantic type (von Fintel 1995) as a redistribution of the load in the semantic composition (Eckardt 2002), as opposed to a bona fine loss of content. I present evidence supporting this criticism from the intensifying use of Italian adjective *bello* ("nice" → "very"), arguing that the original meaning, instead of disappearing, has grammaticalized as part of the expressive content (Potts 2003).

Data – In Italian, the adjective *bello* has developed an intensifying use with meaning similar to *very,* as first discussed Santeusanio and Fesenmeier (2003). As a first observation, we note that *bello* can have an intensifying use with adjectives that normally carry a negative connotation like *brutto* (= ugly). This might suggest that the evaluative component of adjectival *bello* has been lost in the process and is now not contributing to the selectional restriction of the modifier.

(1) Luigi e' **bello** alto
Luigi is nice tall
`Luigi is very tall'
(2) Luigi e' **bello** brutto
Luigi is nice ugly
`Luigi is very ugly'

Analyzing this trajectory as a case of bleaching can be tempting. However, two observations raise a challenge for this account. First, while *bello* is not sensitive to the connotation of the adjective, it is sensitive to the speaker's attitude. In particular, it is not compatible with situations where the speaker has a negative attitude towards the propositional content, as shown by the interaction with attitude marker *purtroppo* or *sfortunatamente* (= unfortunately). Note that a regular degree modifier like *molto* (= very) would be perfectly acceptable here.

(3) # Incredibilmente, Luigi riusci' a sfuggire ai rapitori. Purtroppo, pero', l'acqua del fiume era **bella profonda** e annego' prima di arrivare a casa. (Speaker has negative attitude)
Incredibly, Luigi managed to escape his kidnappers. Unfortunately, however, the water in the river was bello deep and he died before he could get home.

(4) ✓ Incredibilmente, Luigi riusci' a sfuggire ai rapitori. Purtroppo, pero', l'acqua del fiume era **molto profonda** e annego' prima di tornare a casa. (Speaker has negative attitude)
Incredibly, Luigi managed to escape his kidnappers. Unfortunately, however, the water in the river was very deep and he died before he could get home.

(5) ✓ Incredibilmente, il ladro riusci' a evadere. Per fortuna, pero', l'acqua del fiume attorno alla prigione era **bella profonda** e rimase intrappolato. (Speaker has positive attitude)
Incredibly, the thief managed to escape prison. Luckily, however, the water ditch surrounding the prison was bello deep, and he was trapped there.

These data suggest that a felicity condition for using *bello* is that the speaker is somewhat satisfied about the fact that the property at stake holds to a high degree. This, in turn, suggests that the subjective component of the original adjectival meaning is retained in the intensifying use of *bello.* Note, however, that this evaluation can also be anchored to an entity other than the speaker. In (6), for instance, it is relativized to the addressee. Once again, in a context where no positive attitude is natural, the use of *bello* is degraded.

(6) ✓Adesso che sei **bello stanco,** vedrai che bello dormire! (Anchor = you/the addressee)
Now that you are bello tired, falling asleep will be great!

(7) # Adesso che sei **bello stanco,** non riuscirai mai a finire il compito!
Now that you are bello tired, you'll never make it to finish the assignment!

Note that this evaluative component is not part of the propositional content, as shown by the fact that it cannot be targeted by denials. This diagnostic is a well-known test to tease apart expressive from descriptive content (Potts 2003, Rett and Murray 2013).

(8) A:Abbiamo un nuovo giocatore, e' **bello alto!**
*We have a new player on our team, he's **bello** tall.*
B: # No! E' alto, ma non sei felice! (expressive component denied)
No! He's tall, but you are not happy about that!
B': ✓ No! Non è alto. (descriptive content denied)
No! He's not tall.

The analysis – I propose that, in its intensifying use, *bello* behaves as a *mixed expressive* (McCready 2010, Gutzmann 2011). At the descriptive level, it combines with a gradable adjective G and an individual, requiring that the degree instantiated by the individual largely exceeds the degree standard (">> S"). At the expressive level, *bello* combines with a judge α – often the speaker but not necessarily so – and conveys that α deems "nice" the state of affairs outlined by descriptive part (underlined). This part of the meaning, as shown below, is directly inherited by the original adjectival meaning, which simply requires that, given an individual x and an anchor α, the anchor finds the individual "nice". It is precisely this expressive component that determines the inconsistent flavor of *bello* in contexts where the speaker has a negative attitude..

[[Bello $_{\text{INTENSIFIER}}$]] = λ G<d,et> λx.<u>G(x)>>S(G))</u> **Descriptive**
[[Bello $_{\text{INTENSIFIER}}$]] = λα.[Nice <u>(G(x)>>S(G))</u>(α)] **Expressive**
[[Bello $_{\text{ADJECTIVE}}$]] = λα. λx.Nice(α)(x) **Original meaning**

Conclusion – In Italian the adjective *bello* has grammaticalized as an intensifier. While this trajectory might suggest that the morpheme has undergone bleaching, the original adjectival meaning survives semantic change and is preserved at the expressive level. While it does not contribute to the propositional content, it therefore still part of the conventional meaning of the morpheme, and contributes to determine its felicity condition. This case suggests that, while empirically useful, labels such as "bleaching" are not always accurate. Applying the diagnostics and the formal tools of formal semantics to diachronic trajectories can help introduce fine-grained distinctions to the analysis of diachronic paths and have a better understanding of how meanings, rather than being lost altogether, are undergoing change in the way they encoded.

The evolution of the future marker in Kisikongo (Bantu, H16a)

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Cross-linguistically, the most frequently attested sources of grammaticalization for future tense markers are agent-oriented modalities or movement verbs (Bybee *et al.* 1994: 253-70). A much less common evolution is the development of present tense forms into dedicated future markers. As noted by Haspelmath (1989: 45-47), this often results in a markedness violation:

whereas normally the present is the unmarked and the future the more marked form, the opposite is found in those languages where the future historically originates from the present.

In this paper, I study the development of an 'old' present into a dedicated future marker in the Bantu language Kisikongo. Spoken in the vicinity of Mbanza Kongo, Angola, the variety is part of the genealogical South Kikongo subgroup of the Kikongo Language Cluster (de Schryver *et al.* forthcoming, Dom & Bostoen forthcoming). The future tense, consisting of i) a 'zero' prefix in the verbal slot reserved for tense-aspect morphology and ii) the 'neutral' final vowel *-a*, is illustrated in example (1). This 'zero' marker is a common present tense form in most Bantu languages, and is assumed to go back as far as Proto-Bantu (Nurse 2008: 236, 261).

(1) *Bulu ya futa ye ya vata* ***idiila*** *vamosi.*[35]

bulu	ya	futa	ye	ya	vata	i-Ø-diil-a
10.animals	CON	wild	and	CON	5.village	SC10-FUT-feed:APPL-FV
vamosi.						
together						

'Wild and domestic animals will feed together.'

(Watch Tower Bible and Tract Society, 2005)

On the basis of a diachronic corpus, compiled by the KongoKing research group (http://www.kongoking.org/), different stages in the evolution of the old present into a future marker can be reconstructed. To be able to observe these changes in a considerable time frame of 400 years, as the oldest known document written in the variety spoken at that time in Mbanza Kongo is a 1624 catechism (Cardoso 1624), through corpus-driven data, is unique for Bantu diachronic linguistics.

Although the development was already underway in 1624, as shown in (2a), the example in (2b) illustrates that the 'zero' marker was still frequently expressing present tense. Moreover, the fact that the older future marker *-ku-* is found in the 1624 catechism (2c), is indicative of the inceptive stage of the present to future evolution of the 'zero' marker.

(2) a. *Bana mene* ***uenda*** *kuna nzo a mukissi.*

bana	mene	u-Ø-end-a	kuna	nzo	a	mukissi
in	morning	SC1-FUT-go-FV	to	9.house	CON	3.religion

'In the morning he will go to church.'

b. *Bauaaba* ***a'andika*** *aleeke ole o Esseetu;* ***avutuula*** *o akaka: …*

bauaaba	a-Ø-andik-a	aleeke	ole	o	Esseetu;
now	SC2-Ø-begin-FV	2.children	two	AUG	Our.Father
a-Ø-vuutul-a	o	akaka:			
SC2-PRS-follow-FV	AUG	2.others			

'Now two children begin (to say) the Our Father; the others follow: …'

c. *…, ya nkii bo au* ***ekuvua*** *e nsi.*

ya nkii bo au	e-ku-vu-a	e	nsi.
because	SC1-FUT-have-FV	AUG	9.earth

[35] Numbers represent Bantu noun classes. Abbreviations: CON = connective, SC = subject concord, FUT = future, APPL = applicative, FV = final vowel, AUG = augment, PRS = present.

'…, because they will own the earth.'
(Cardoso 1624)

It will furthermore be shown that this did not result in a gap in the tense/aspect paradigm, but that present tense is readily expressed by other strategies such as the present perfect with stative verbs, and the imperfective suffix *-ang-* or the progressive 'fronted infinitive construction' (De Kind *et al.* forthcoming) with dynamic verbs.

Exploiting both the diachronic corpus, which in addition to Cardoso (1624) comprises of a sermon from 1648 (Roboredo 1648) and a bible from 1926 (Anonymous 1926), as well as historical and recent Kisikongo grammars (Guinness 1882; Bentley 1887, Ndonga 1995) and present-day corpus material, I attempt to reconstruct the diachronic, semantic development of the Kisikongo zero future.

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Modeling decompositional cyclicity: constant entailments in meaning change

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The present aim is to co-promote the discussion of connections between semantics and recurring patterns known as cycles or spirals. We capitalize on the notion of constant entailments proposed in semantic theory (Beck 2012; cf. also Beck & Gergel forthc.) and explore to what extent it can account for Jespersonian patterns, by focusing on the specific diachronic interplay of decompositional adverbs.

The development of negative (and other) markers can follow cyclical or spiral trajectories, in the course of which a marker is gradually replaced by another under co-occurrence and appropriate semantic, syntactic and phonological conditions (Jespersen 1917). There need not be a categorial match between the two elements before the new item is established. Cyclical patterns have been extended to many case studies (see especially van Gelderen 2006, 2011; cf. also the articles in van Gelderen 2008, and related work). But what is the role of semantics? We propose capitalizing on the insights about the cycle and explore in which cases they can be transferred when it comes to semantic change. The baseline hypothesis: the regularities of cyclical trajectories can be fruitfully discussed in connection with the framework of compositional semantics (à la Eckardt 2006). Drawing on extensive corpus work, we investigate the relationships between so-called decompositional adverbs (von Stechow 1995, Rapp & von Stechow 1999, Beck 2005, Pedersen 2014) and their diachronic paths (Beck et al. 2009, Beck & Gergel forth., Gergel & Beck 2015, Gergel & Stateva 2014). A well-known such adverb today is *again*, (1).

Following an idea laid out in Beck & Gergel (forthc.), Gergel & Beck (2015), the change in the adverb *again*, which was originally a preposition with a path argument (compare cognate *against*; s. Fabricius-Hansen 2001 and e.g. Gergel 2012 for a corpus study) can be accounted for by using constant entailments (CEs). CEs are defined as in (2). This can account for the fact that at crucial periods in the development of *again*, there are contexts in which a genuine counterdirectional reading is in the pertinent configurations truth-conditionally indistinguishable from a restitutive/repetitive entry of the adverb (the latter corresponds to the structural theory of *again*); cf. (3), (4). Historical data show that both the structural and the counterdirectional analysis is needed but at different times.

What we can explore further is whether CEs become relevant in further cases related to decompositionality. Gergel, Blümel and Kopf (forthc.) verify in a corpus study that the adverb *eft* in Old and Middle English had meanings close to *again.* We may note that it had repetitive readings at a time when *again* was barely visible in its adverbial function. What is more, *eft* had a temporal reading which is unavailable with *again* (cf. (5)-(7) for readings of *eft*). Two consequences emerge. First, the case study of *eft* offers a clear and extended testing ground for the notion of CE in a related but not identical domain. The domain is extended because the temporal reading still needs to be accounted for. We explore the hypothesis that the temporal readings (in the sense of *after(wards)*) can be accounted for via CE when semantic computation and the pragmatics of its occurrence are integrated. Context becomes crucial. While a repetitive and a temporal meaning are not equivalent in general, in broader contexts, they can come down to similar conditions of evaluation. In sequences of the type *P [afterwards P],* the first occurrence of P is incorporated into the common ground; on a temporal reading this comes close to cases of obligatory presuppositions. Furthermore, *eft* and *again* form a diachronic cycle. The second point, then, is that the very pattern of this cycle can be now modeled in a new way, viz. via CE. Truly repetitive/restitutive readings are reinforced by the addition of the original adposition *again* (cf. *back* with restitutive *again*). The hypothesis to be explored is whether such additions can be accepted as truth-conditionally close enough for the purposes of communication.

Examples

(1) *Ann closed the door again.* [PSP: The door had been open./A. had closed it before.]

(2) CEs: Variability in the meaning of an expression α between interpretations α' and α'' is promoted by the existence of contexts ϕ in which an occurrence of α under both interpretations α' and α'' leads to the same proposition ϕ'.

(3) Repetitive meaning: $[[again_{rep}]] = \lambda P.\lambda e{:}\exists e'[e'<e \ \& \ P(e')].P(e)$ (identical with restitutive entry on the structural analysis)

(4) Counterdirectional meaning: $[[again_{ctrdir}]] = \lambda P.\lambda e{:}\exists e'[e'<e \ \& \ P_C(e')].P(e)$

(5) *Efterward me ssel þerne mete **eft** chyewe /ase þe oxe þet...* (CMAYENBI111.2146)
Afterward one shal this food again chew/ as the ox that… [repetitive reading]

(6) *ðe feorðe time wes ðoa ha misde hire sune. & **eft** him ifunde.*
the fourth time was at-that-when he missed her son and again him found.
(CMANCRIW1,II.62.651) [restitutive /counterdirectional reading; cf. 'miss/find']

(7) ***Eft** ða þa Iulianus ... wearð to casere gecoren,...* [temporal reading]
Afterward when Julianus was to emperor chosen (coaelive,+ALS[Agnes]:394.1990)

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The role of emphasis in the Quantifier Cycle

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Semantic analyses of the systematic diachronic processes affecting the expression of negation have convincingly argued that the driving force behind Jespersen's Cycle is pragmatic in nature. In particular, Eckardt (2003, 2006) for French and Kiparsky and Condoravdi (2006) for Greek have shown that the origin of the new sentential negative marker regularly resides in a focused element used to reinforce the older negator in order to express polarity emphasis (e.g. French *pas* '(not even) a step', Greek *dhen* < *oudén* 'not even one'). Emphatic constructions are subject to "inflationary effects" (Dahl 2001), thus may soon lose their emphatic component, cyclically triggering the grammaticalization of new emphatic means.

In this work I test the hypothesis that emphasis plays a role also in a related cyclic development involving indefinites, the Quantifier Cycle. To this end I present a case study from

the history of Romance, for which I argue that the emphatic semantic component leads to a peculiar grammaticalization pattern also involving the syntax of the indefinite. Willis (2012), Willis et al. (2013) label 'Quantifier Cycle' the cross-linguistically frequent, systematic semantic change that affects certain indefinite items (e.g. French *personne*) leading to a progressive restriction of their contexts of use, up to the point where the negative operator becomes the only possible licenser. At the beginning of the cycle, the element is a plain indefinite or a generic nominal expression. Intermediate stages of the cycle involve the extension to weak polarity environments. The (pre-)final stage often witnesses the employ of the focused indefinite as a reinforcer of negation in emphatic constructions, thus potentially intertwining with Jespersen's Cycle. Emphasis may then bleach at the terminal stage, especially when the indefinite becomes a 'plain' element of Negative Concord structures. Gianollo (2013) analyzes the Latin indefinite *aliquis* 'some or other' as an epistemic indefinite that, due to its alternative-evoking semantics, in course of time expands into weak polarity contexts and starts to behave as a negative polarity item already in Late Latin. This instance of the Quantifier Cycle is carried forward by the continuations of *aliquis* > *aliquis unus* >**alicunus* in Standard Romance, e.g. Italian *alcuno* / French *aucun* / Catalan *algun* / Spanish *algún* / Portuguese *algum*. In Romance a remarkable split takes place in the singular (Martins 2011, 2012): in some languages (Spanish, European Portuguese) the indefinite has both an epistemic use, not necessarily sensitive to polarity (1a, 2a), and a polarity-sensitive use (1b, 2b). In other languages (French, Italian) it just retains the polarity-sensitive use (3, 4a-b). Modern Catalan *algun* only has epistemic uses, but earlier stages of the language show that a negative polarity use was possible and subsequently got lost (Par 1923).

(1) a. ***Algum*** *animal vive aqui* (European Portuguese, Martins 2012: 2)
some animal lives here
'Some animal lives here'

b. *Animal****algum*** *vive aqui*
animal no lives here
'No animal lives here'

(2) a. *Eso lo hizo* ***algún*** *estudiante de esa clase* (Spanish)
that it made some student from that class
'Some student from that class did it'

b. *No vive aquí persona* ***alguna*** (Spanish, Martins 2012: 7)
not lives here person any
'Nobody lives here'

(3) *Non ho visto* ***alcuno*** *studente* (Italian)
not have seen any student
'I haven't seen any student'

(4) a. ***Aucun*** *étudiant n'est venu* (Standard French)
any student not=is come
'No student came'

b. *Il y en a* ***aucun*** *qui mange ton gâteau* (Colloquial French)
it there PART have nobody who eats your cake
'There's no one eating your cake'

Depending on the system of negation in the respective language, the indefinite may result into a negative polarity item (NPI) (Italian, Spanish), or in an element of Negative Concord ('n-word') (Standard French, Portuguese), or even in a negative indefinite (Colloquial French).

Crucially, languages retaining two uses (epistemic and polarity-sensitive) require inversion between the head noun and the indefinite when licensed by the negative operator (1b,

2b). Martins (2011, 2012) has interpreted this as a form of negative inversion, involving the insertion of a negative operator in the top layer of the determiner phrase (DP). I propose instead that inversion is due to focus, and I analyze it along the lines of Bernstein (1997), who notices how this pattern is not limited to polarity-sensitive indefinites, but also extends to focused demonstrative reinforcers and possessives. This analysis has a number of advantages. First, it dispenses with the insertion of a syntactic projection NegP, which is problematic especially in the NPI cases and also in cross-linguistic perspective, since in Italian –and less productively in French– inversion, while not being obligatory, is nonetheless possible, cf. (5):

(5) *Non c'è stata obiezione* ***alcuna*** (Italian)
not there=is been objection any
'There hasn't been any objection'

Second, rightward focus is a strategy that Romance also adopts at the clausal level; as Bernstein (1997) shows, the underlying syntactic mechanism accounting for DP-internal inversion would find a parallel in Romance VOS orders (Ordóñez 1997, Zubizarreta 1998): the focused element remains in situ, and the deemphasized material raises to the left, in order to allow for the focused element in final position to receive nuclear stress.

Third, attributing inversion to focus provides a better functional motivation for the semantic change, since emphatic focus has been convincingly connected to polarity sensitivity in the semantic literature (since Krifka 1995). Focus activates all possible alternatives for the denotation of the focused element; under negation, this has the effect of excluding all possible alternatives, even the most marginal / unlikely ones, resulting in strengthened negation. In Spanish and Portuguese the same indefinite item, when epistemic, thus without inversion, evokes a limited set of alternatives, conveying the information that the speaker is not certain about the identity of the referent, although s/he can already exclude some possibilities ('anti-singleton constraint' in Alonso-Ovalle & Menéndez-Benito 2010). Under emphatic focus the set of alternatives is maximally widened, yielding the licensing requirement that the element appear in a downward-entailing context, in order for it to be maximally informative. Indeed, when optional, as e.g. in Italian but also in earlier stages of Portuguese (Martins 2011, 2012), inversion contributes an emphatic meaning. In Portuguese, where inversion is fully conventionalized, emphasis is absent. This suggests a cline of semantic development where emphasis, intended as focus, acts at first as optional additional strengthening of the negation by means of an NPI, and later becomes bleached in the grammaticalization process leading to an n-word, as in Portuguese. Spanish witnesses an intermediate stage where inversion is a way of disambiguating the two (epistemic and polarity-sensitive) functions of the indefinite.

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If diachronically

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I. At first blush, the meaning of polar questions and the meaning of conditionals do not seem similar at all:

(1) Is Miranda smart (or not)?
(2) If Miranda is smart, she will solve the problem

Most of the theories proposed for the semantics of questions are very different from those proposed for conditionals. In a nutshell: a polar question asks which of the two alternatives, p or ~p, is true. (1) asks the hearer to pick between 'Miranda is smart' and 'Miranda is not smart'. On the other hand, a conditional like (2), does not ask anything, but rather asserts that the worlds in which Miranda is smart, are a subset of the worlds where she will solve the problem.

II. Yet, across languages, there are quite a few morphosyntactic similarities between polar questions and conditionals. **First**, in remarkably many languages, the complementizer that is used in embedded polar questions is homophonous to the one in conditionals. This is also the case for English *if*, which can be seen in conditionals, as in (2), as well as in the embedded polar question in (3):

(3) She asked *if* Miranda is smart

This homophony is too common crosslinguistically to be accidental. For example, Albanian *nese* exhibits these properties too (see (4)-(5)). Other languages with the same homophony are, for instance, Italian, Spanish and Greek.

(4) Ajo pyeti nese Miranda eshte e zgjuar
She asked if Miranda is smart
(5) Nese Miranda eshte e zgjuar, do ta zgjidhi problemin.
If Miranda is smart will solve problem-the

Second, in many languages, polar questions require subject-AUX inversion, as can be seen in (1), most likely the result of I-to-C movement (den Besten 1976 and many since then). Subject-AUX inversion can also be found in the conditional antecedent (in so-called V1-conditionals), with the verb moving to the complementizer position (where *if* would have appeared otherwise). In Modern English, this is possible only in counterfactual conditionals (6),

but in other languages, for instance Dutch (as well as earlier stages of English), subject-AUX inversion can also be found in non-counterfactual conditionals (7):

(6) a. If she had known you were sick, she would have visited you
b. Had she known you were sick, she would have visited you

(7) Houd je van vlees, braad je in Croma
Love you of meat, bake you in Croma

'If you love meat, you use Croma to bake'

Iatridou and Embick (1993) argue for the following generalization (their "S1"):

(8) V1 tensed adjunct clauses [that is, tensed adjuncts in which I-to-C movement has taken place and where Spec,CP is not overtly filled are <u>always</u> interpreted as conditional clauses, and not, e.g., as 'because' clauses.

If (8) is correct, then a second important morphosyntactic similarity between conditionals and polar questions emerges: both exhibit I-to-C movement.

III. The two similarities together show that all the morpho-syntactic shapes that conditionals can take in English are the same morphosyntactic shapes of that embedded and non-embedded polar questions in English. Given that the semantics of interrogatives and conditionals are so different, these striking morpho-syntactic correspondences call for an explanation. Starr (2012), the only proposal known to us that aims at accounting for this homophony, proposes that the two should actually receive a unified semantics. According to him, a conditional *if p, q* gives rise to the following interpretational procedure:

(9) Raise the Yes/No question "p?"
Take the positive answer as a highlight (so "suppose p")
Then p should entail q

The fact that as a first step the Yes/No question "p?" is raised forms the connection with embedded interrogative if. In other words, conditionals, for him are like questions that trigger a "suppose yes" answer:

(10) If it rains you should get an umbrella =
Does it rain? (Then) you should get an umbrella

Since for Starr the semantics of conditional and interrogative complementizers are the same, it must follow from the syntax that an *if*-clause sometimes gives rise to a conditional and sometimes to an interrogative interpretation (he does not further specify what syntactic mechanism would be responsible for this disambiguation). If an if-clause is an argument of a verb like "wonder", it is just an interrogative. If an if-clause is adjoined to another CP, the two clauses will be interpreted as standing in a conditional relation.

IV. We argue that there are a number of difficulties for Starr's proposal for a *synchronic* analysis of the semantics of conditionals and questions. Apart from the absence of a clear syntax behind his proposal, it is also the case that various other semantic differences between conditionals and interrogatives show that the two should not be conflated. Moreover, Sparr's proposal predicts that conditional/interrogative complementizers should also be able to act as main clause interrogative markers in languages like English, contrary to fact. Finally, this account does not predict why V1 conditionals cannot in every language function as conditional clauses (or only with more restricted semantics). However, we will argue that his account provides the seeds for a *diachronic* analysis of the morphosyntactic similarities between polar

questions and conditionals. Only a diachronic account can explain both the correspondences between conditional and interrogative complementizers without simultaneously claiming that the two are semantically identical.

V. In short, we propose that synchronically, conditional *if* and embedded question *if* are different items, but they may come from a common ancestor: a matrix question interrogative complementizers that later on may disappear, similar to the development of V1 conditionals, as conjectured by Jespersen (1940) and further discussed by Van den Nest (2010) (which are taken to be reanalysed/grammaticalized polar questions). The scenario is the following: if some question particle Q_{PART} could introduce a main clause polar question, there it could easily grammaticalize/be reanalysed into a conditional complementizer (Q_{IND}):

(11) Q_{PART} it rains? You should get an umbrella -> Q_{IND} it rains, you should get an umbrella

If in addition, if this Q_{PART} would also be the historical source of the embedded interrogative complementizer, the lexical ambiguity between conditional and embedded interrogative complementizers already follows. If, finally, at a later stage the main clause usage of Q_{PART} would disappear, the lexical ambiguity that we discuss above is all that is left. This scenario thus requires the interplay of three diachronic processes in a particular language to derive the lexical ambiguity: (i) the reanalysis of the main clause question particle into the conditional complementizer along the lines of (11), the grammaticalisation of a main clause Q_{PART} into an embedded Q_{PART}, and (iii) the disappearance of the main clause Q_{PART}. Whereas processes (ii) and (iii) are quite familiar (involving the parataxis -> hypotaxis change (cf. Kiparksy 1995, Hopper & Traugod 2003)), evidence for process (i) is harder to present. For English, or example, the oldest documents already show a conditional complementizer *if* (*gyf*/*yif*). However, other languages, such as Slavic languages may be of more help. For instance, the contemporary Czech conditional complementizer *jest-li* in Old Czech could also be used to introduce main clause polar questions.

V. To conclude, if the above is correct, we have proposed a possible diachronic explanation for the lexical homophony between the English polar question complementizer and the conditional complementizer. The presence of such an alternative explanation makes then it no longer necessary to look for a synchronic explanation of this homophony and to propose a unified semantics for conditionals and questions with all its related problems.

A diachronic account of agreement mismatch in English relative clauses

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This paper offers a diachronic account of a rather frequent though rarely discussed (e.g. Quirk et al. 1985: 765, Burchfield 1996: 36, 550) agreement mismatch construction in English restrictive relative clauses (RCs) as in **Errore. L'origine riferimento non è stata trovata.**,

where the verb in the RC displays singular agreement although its subject is a gap apparently controlled by a plural antecedent.

(1) It had been one of those suggestions that stuns everyone with its rightness. (ALH 873)

The construction consists of indefinite pronoun *one*, followed by *of*, then either the definite article *the* or 'determinative' (Himmelmann 1997) *these* or *those*, then an NP with a plural head noun modified by an RC whose subject gap fails to trigger plural agreement on the verb: *one of* $DEF.DET\ NP_{PL}\ REL\ V_{SG}$. This word order precludes an explanation of the agreement mismatch in terms of 'attraction', and the construction is too frequent (see below) to plausibly be dismissed as some other kind of speech error. Instead it is perhaps a case of what Comrie (2003) calls 'trigger-happy' agreement, in that singular rather than plural agreement never seems to be obligatory. By contrast, there are various factors which make singular agreement ungrammatical or strongly dispreferred, including, for example, an emphasis on the numerosity of the set denoted by the plural NP **Errore. L'origine riferimento non è stata trovata.**, or the insertion of any noun rendering *one* a determiner rather than a pronoun **Errore. L'origine riferimento non è stata trovata.**.

(2) ?This is one of the many books that addresses the snobbery of the English (cf. A05 857)
(3) ?One example of the inadequacies that arises in this case… (cf. HH2 1033)

My key descriptive claim is that a necessary (but not sufficient) condition for singular agreement is that there be a salient interpretation of the plural NP on which its referents are not (uniquely) identifiable to the addressee, despite the definiteness marking. In the majority of cases, including the example in **Errore. L'origine riferimento non è stata trovata.**, this will be because the RC is what Hawkins (1978) calls 'referent-establishing', as in **Errore. L'origine riferimento non è stata trovata.**, where the existence of the referent of the NP is not part of the common ground immediately prior to utterance. As shown by Lucas (2011), NPs of this type necessarily involve failure of the existence presupposition carried by definiteness marking, and can therefore only be interpreted if the addressee accommodates.

(4) A: What's wrong with Bill?
B: Oh, the woman who dated him last night was nasty to him. (Hawkins 1978: 132)

The above descriptive claim is borne out by data drawn from the British National Corpus (BNC) (the source of all numbered examples here except **Errore. L'origine riferimento non è stata trovata.**). In a sample of 343 NPs of the relevant type, 195 tokens (57%) had plural agreement in the RC and 147 (43%) had singular. Among those with singular agreement there was just one token **Errore. L'origine riferimento non è stata trovata.** where no accommodation-requiring interpretation was possible (because in context the definite NP is clearly anaphoric).

(5) Mungo wondered whether she had been one of the girls who was "sweet" on Jos.

(ACV 762)

Of the remaining 146 tokens, 139 (95%) contained RCs for which a (or the most) salient interpretation was that they were referent-establishing. The referents of the NPs in the other

seven tokens (5%) were not (uniquely) identifiable for another reason: the NPs were plural superlatives, as in **Errore. L'origine riferimento non è stata trovata.**.

(6) It's probably one of the most sensitive songs about a prostitute that's ever been written.
(CAE 595)

As pointed out by Stateva (2005: 3), plural superlatives have an odd combination of properties: definite-marking is obligatory but their "extension […] in a constant context is not unique". Even if we are familiar with all the relevant songs in **Errore. L'origine riferimento non è stata trovata.**, there is no unique subset of these songs which can exclusively be declared 'the most sensitive': the membership of the set of 'most sensitive songs' will be similar to, and as fuzzy as, that of the set of 'very sensitive songs'. As such, plural superlatives and definite-marked NPs with referent-establishing RCs have in common that their associated existence/uniqueness presupposition fails, necessarily so in the case of plural superlatives. Note in this connection that a separate search of the whole BNC corpus for constructions of the kind in **Errore. L'origine riferimento non è stata trovata.** (query: one of the (most|*est) ****** (that|which|who)) produces 25 tokens, of which all but three have singular rather than plural agreement.

How should we explain the phenomenon of singular agreement in RCs of this type, and its (near-total) restriction to definite-marked NPs where the existence/uniqueness presupposition fails? My proposal is that this construction has grammaticalized as an expression of indefinite singular determination of the head-noun predicate, similarly to French *des gens* 'some people' < 'of the people' and Arabic *baʿḍu n-nās* 'some people (/ one person)' < 'some (/one) of the people'. Various of pieces of evidence favour this analysis. First, if *one of* *DEF.DET* NP_{PL} can, despite appearances, function as a singular indefinite then we have a simple explanation for why the verb in the RC can show singular concord at all. Second, the (near-total) restriction of singular concord to NPs where the existence/uniqueness presupposition fails makes sense: such NPs are arguably definite in form only, so it is natural that only these would grammaticalize as actual indefinites (though a gradual subsequent extension to a wider range of contexts, as in **Errore. L'origine riferimento non è stata trovata.**, is also what we would expect). Third, not only is the general grammaticalization path PARTITIVE + DEFINITE > INDEFINITE attested in the histories of (at least) French and Arabic, precisely the same singular-agreement construction discussed here for English is found in some, but apparently not all, other languages. (I have examples for German, Dutch, French, Italian and Maltese. The construction does not occur in the 800k *Tunisiya* corpus of Tunisian Arabic, the variety of Arabic to which Maltese is most closely related). If singular agreement in this construction is neither restricted to English nor universal, then this points to its being a historical development that a language can, but need not, undergo (and perhaps one that is liable to spread through contact), rather than being an emergent property of universal synchronic syntactic or semantic principles.

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The role of compositionality in semantic reanalysis

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Eckardt (2006, 2011) points out that compositionality plays a key role in semantic reanalysis, which in turn is an important mode of language change. One of the main ways in which compositionality considerations can trigger semantic reanalysis is as follows: If the meaning of a complex expression changes, compositionality dictates that the meaning of at least one of the parts of the expression has to change as well. Semantic reanalysis of a subpart of an expression, when triggered by semantic change in the interpretation of the complex expression, need not be accompanied by syntactic reanalysis. There is another case to consider as well. When the meaning of the complex expressions does not change, but the meaning of one of its parts does, compositionality necessitates that semantic reanalysis depends on a prior syntactic reanalysis.

Thus, we can formulate (at least) two patterns of semantic change driven by compositionality:

(1) For α composed of β and γ:

a. the meaning of α changes → the meaning of β or γ changes, with or without syntactic restructuring

b. syntactic restructuring of α without a meaning change for α → the meaning of β or γ changes

The goal of this talk is to explore some of the mechanisms behind (1a) and (1b). I hypothesize that in (1a) semantic reanalysis can proceed without an accompanying syntactic reanalysis only when the element whose meaning changes (e.g., β) is a content/lexical item. If β

is a functional item, its meaning changes together with a concomitant syntactic change. In other words, semantic change of a functional element is always the result of semantic reanalysis that goes hand-in-hand with syntactic reanalysis.

(2) For α composed of β and γ, β a functional element: β undergoes semantic change only with syntactic restructuring of α, with or without a meaning change for α

I will discuss two case studies of meaning change from the history of Slavic, illustrating (2).

Case 1. Old Slavic oba was a numeral meaning 'two'. In most of the modern Slavic languages (e.g., Polish, Serbian, Russian) oba has the meaning of 'both'; in the remaining Slavic languages (Bulgarian, Macedonian) it has been lost (Łazorczyk and Pancheva 2009). Thus, in the history of most of the Slavic languages, complex expressions [oba Ns] change their meaning from 'two Ns' to 'both Ns', i.e., they acquire a distributive meaning. Examples (3)-(5) illustrate that Old Slavic oba did not have a distributive meaning: it participated in the formation of complex numerals, it could be used with collective predicates, and it could be a complement to partitive prepositions. None of these are environments where distributive both can be used, and accordingly, none accept oba in the modern Slavic languages.

(3) siję oba na desęte posъla isъ. zapovědavъ imъ glę
these two on ten sent Jesus having-ordered them saying…
'These twelve (lit. 'two-on-ten') Jesus sent out telling them…' (Matthew 10:5)

(4) i prilěpitъ sę ženě svoei . i bǫdete oba vъ plъtь edinǫ.
and will-cling refl wife self's and will-be two in body one
'And he will cling to his wife, and the two will become one flesh' (Matthew 19:5b)
cf. English: 'And he will cling to his wife, and *both/the two will become one flesh.

(5) ky otъ obojǫ sъtvori voljǫ otьčǫ?
which of two did will of-the-father
'Which of the two did what his father wanted? (Matthew 21:31a)
cf. English: 'Which of *both/the two (of them) did what his father wanted?'

The semantic change affecting [oba Ns] results in semantic reanalysis, which, as compositionality dictates, consists of a change in the meaning of oba. Since oba is a functional rather than a lexical/content element, the semantic reanalysis is accompanied by syntactic reanalysis (in line with (2)): oba changes from a numeral to a determiner, and is merged higher in the structure. Whereas Old Slavic oba follows demonstratives (see (3)), oba in modern Slavic precedes them; furthermore modern Slavic oba can co-occur with numerals (see (6) from Serbian).

(6) a. { Oba ta / *ta oba } dečaka b. obadva dečaka
both these these both boys both-two boys

Case 2. In Old Slavic the comparative morpheme attached in two positions, to the root (with a limited number of roots) or to a projection bigger than an adjective, as in (7b,c) (Pancheva 2015). In modern Slavic, the (productive) comparative morpheme attaches to an adjective (not a root or an augmented projection) (see (8), from Russian)

(7) a. dal-ьn-a b. dal'-ьš-i c. dal-ьn-ě-iš-i
far-adj-fem.sg far-comparative-fem.sg far-adj-ě-comparative-fem.sg

(8) dal'-n-ee

far-adj-comparative

As far as we can tell, the meaning of a complex expression [root-(X)-comparative] did not change between Old and modern Slavic. Nevertheless, semantic reanalysis occurred, accompanied by (morpho-)syntactic reanalysis, in line with (2), given that the comparative morpheme is a functional element. The augment -ě (see (7c) was reanalyzed as being part of the comparative morpheme, and consequently, the position of merge of the new comparative morpheme was the adjective (not the root or a form bigger than the root). Compositionality considerations dictate that the new structure must come with a new meaning for the comparative morpheme that is part of it.

The two case studies are, of course, not necessarily exhaustive of the way compositionality plays a role in semantic reanalysis. Nor can the claim in (2) be definitively proved just on the basis of the examined case studies. Nevertheless, the semantic changes illustrated here demonstrate two patterns of semantic reanalysis triggered by compositionality, with and without a change to the meaning of the complex expression. In both cases, semantic reanalysis is accompanied by syntactic reanalysis, with a functional element receiving both new meaning and new syntactic analysis.

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Towards a Pragmatic Approach to the Rise of Indefinite Articles

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Grammaticalization Theory (e.g., Heine 1997) is the dominant approach to linguistic change, and has been extensively applied to indefinite articles. It has established that the diachronic source in Romance and Germanic are "cardinality expressions" of type ONE (like Latin *unus*). Grammaticalization theory generally focalises on a form, and tracks its evolution over time. However, recent research on Romance (see Pozas Loyo 2010, Carlier 2013) has shown that the actual diachronic development of indefinite articles does not fit well with Heine's scenario. Indeed, medieval German and French indefinite articles were less restricted than their

contemporary descendants (they appeared with mass nouns, plurals, generics, etc.).

Basic Outline of Methodology I assume that language change is governed by everyday choices speakers make – and thus basically pragmatic in nature. I take for granted an evolutionary perspective on language, assuming that out of several possible forms to express some meaning, the frequencies of these forms will change over time. As a consequence, my focus concerns not so much the fate of the changing expression (if it does change), but rather on speaker choices (on the background of an interaction with hearers) with respect to possible forms, and their motivation.

Thus, the task of dealing with the diachronic evolution of a grammatical object (here: the indefinite article) becomes the following: at a time where the article-less nouns or NPs where at least largely dominant, we try to ascertain the meaning of the article-less variant and of the one that eventually would become the article. This establishes the alternatives. Since on the outset, by definition, the innovative form was never obligatory, there must be some tendency underlying an increasing use of the innovative form. In other words, the speaker must have some reason to use that new form, in a way that benefits him, by achieving some rhetorical effect in the hearer. Since rhetorical effects are the more effective the less frequent they are, the continuous use of the alternative form will entail semantic erosion (see Schaden, 2012).

Extrapolating from Contemporary Germanic I will base my tentative of reconstruction of the earlier stages of the evolution of indefinite articles on a corpus study of the *Vulgata*, and on a synchronic analysis of modern Germanic languages like English and (varieties of) German where there is an opposition between an indefinite article *A* and a cardinality determiner *ONE*, as illustrated in (1). These results will then be extrapolated to the opposition between absence of article vs. cardinality expressions.

1) a. *a* ring to rule them all b. *one* ring to rule them all

In contemporary English, the indefinite article is reduced to a schwa, whereas the cardinal determiner has retained a fuller phonetic form. This sets these varieties of Germanic apart from Romance, where there is no obvious difference between these two functions of the descendent of *unus* (e.g., in French, both versions of (1) would be translated as "***un*** *anneau pour les gouverner tous*"). An important observation is that in these Germanic languages, the cardinal determiner did not *become* an indefinite article; the indefinite article is a cliticized version of the cardinal determiner, a cardinal determiner that did not, however, necessarily change in itself. In current English, in some circumstances, there seem to be differing truth-conditions attached to these forms, as for instance in donkey-sentences.

2) a. Every farmer who owns a donkey beats it.
b. Every farmer who owns one donkey beats it.

According to (2b), farmers owning more than one donkey do not necessarily beat it, whereas (2a) does assert that such farmers beat their donkeys. Therefore, *a* seems to be monotonically increasing, whereas *one* seems to be non-monotonic. This is concordant with the observation by Le Bruyn and Pozas Loyo (2014) that *a N* cannot give an answer to *how much?*-

questions, does not make reference to a scale, and cannot trigger scalar implicatures. Yet, in many contexts, it is difficult to meaningfully oppose these two forms (see 3, adapted from Abbott 2004, who opposed in her original example the indefinite to the definite article):

3) ?*That wasn't A reason I left Pittsburgh, that was ONE reason.

Limits of the Comparison A crucial difference between modern indefinite articles and zero-articles in earlier stages of the language is that, although the modern indefinite is a clitic, it may at least be metalinguistically stressed, which is not an option when there is no signifier.

Second, one needs to be aware that in late Latin, and in Medieval Romance and Germanic, the ancestor of the indefinite could not only express the cardinality 1, but had other, related meanings, such as restriction (*only one*, see Carlier 2013), sameness, unicity, or lonelyness (both in German and English, *alone* comes from a reinforced *all one*, litt. *all alone*). Notice also that such "cardinality expressions" standardly allow for plural forms (see Pozas Loyo 2010: 130 for Latin), although these may be infrequent, and may occur only in highly specialized contexts. The existence of a plural form cannot thus be taken to be in all instances an indicator of advanced grammaticalization; on the contrary, it can be interpreted as a fossil.

Meaning Strengthening I will show that in the *Vulgata,* the adnominal uses of *unus* (see 4b, 5b) are often the same as its pronominal uses (see 4a, 5a). I also argue that at least some uses of *unus* can be seen as emphatic uses, where it has been used to achieve an effect of meaning strengthening.

4)a. et ecce *UNUS* accedens ait illi […] Mat 19:16 (*and lo, one coming approached him*)
b. et accedens *UNUS* scriba ait illi […] Mat 8:19 (*and one scribe approached him*)

(4ab) are examples of presentative contexts, where *unus* seems to mark the introduction of a new discourse referent – a typical function of indefinite articles. However, at that point in Latin, there was no need to introduce a discourse referent by *unus,* so this cannot be the reason for the introduction of *unus*. All such examples with *unus* (adnominal or pronominal) can be rendered in English as "*some N arrived"*, that is, a N which we know nothing about and whose identity is not really of interest. Obviously, this meaning of *unus* would appear in scenes where that entity is introduced, and not later, but it arguably has nothing to do with introducing a discourse referent per se.

5)a. […] expedit enim tibi ut pereat *UNUM* membrorum tuorum quam totum corpus tuum mittatur in gehennam [Mat 5:29] (*it is better that one of your members perish than that your whole body be put to hell*)

b. […] et ipsi *UNO* digito vestro non tangitis sarcinas. [Luke 11:46] (*and touch the burdens not with one of your fingers;* litt: *one your finger*)

(5ab) are examples of *unus* in nonveridical contexts (under negation, or modals). I will argue here that "*didn't lift a finger*" is a weaker alternative of "*didn't lift one (single) finger*", and that the use of *unus* is motivated by the effect of strengthening the meaning (probably by domain

widening). Notice that I assume that the appearance of unus depends on two different meanings in the "unity-complex", and does not straightforwardly on one common meaning spreading through different grammatical contexts.

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Space in diachrony: asimmetries in the space domain and their developments

Asimmetries in path encoding in Sicilian: a diachronic overview.

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This talk aims at describing the encoding of path within the system of spatial relations in Sicilian, an Italo-Romance language spoken in Sicily and its satellite islands. In general terms, spatial relations in Sicilian remain largely unexplored in the light of the current linguistic theories. As a consequence, the first point addressed in the proposed description is the comparison of Sicilian data with the cross-linguistic scenario. It is generally argued in the relevant literature that the encoding of path appears to be less autonomous compared to source, goal, and location at the cross-linguistic level, and its encoding is frequently based on location (see Stolz 1992). In Sicilian, the system of spatial relations can be broadly described as follows:

(a) Location and direction can be expressed by the same prepositions, whose specific spatial value depends on the presence of a state or motion verb respectively. Moreover, each preposition is typically found with specific landmarks:

- *a* ‘in, at, to’ (< Lat. *ad* ‘towards, near to, by’, cfr. Rohlfs 1969: 798) + place nouns:

(1) *vaiu **a’** casa /sugnu **a’** casa*
‘I’m going home/I’m at home’

- (*i*)*n* ‘in, to’ (< Lat. *in* ‘*in*(*to*)’, cfr. Rohlfs 1969: 210; Varvaro 1988: 723) + very specific and salient landmarks (such as Palermo, that is, the administrative, cultural and touristic capital of Sicily; or the ground):

(2) *vaiu **‘m** Palermu*
‘I’m going to Palermo’
(3) *accura a un cariri **‘n** terra*
‘Be careful and not to fall to the ground!’

- *nn-* (the etymology is discussed: it was traced back to the Sicilian adverb *unni* 'where' or to Latin *intra* or *intus* (*ad*) 'inside’, cfr. Rohlfs 1969:228; Varvaro 1988:723; Leone 1995:52) + animate nouns (or nouns denoting commercial activities, e.g. *Benetton*):

(4) *vaiu **nnù** dutturi/**nnà** zia/**nnì** Benetton*
‘I’m going to the doctor’s office/ my aunt’s house / the Benetton store’

(b) Source is expressed by means of the preposition *d*(*i*) ‘from, of’ (< Lat. *de* ‘from’, Rohlfs 1969: 208), which is also found in some perlative constructions:

(5) *vegnu **di nnì** tia*
‘I’m coming from your place’

(6) *pigghiavù*	***di***	*dda*	*pì*	*gghiri*	*a*	*Tò*	*casa*
take.PST.1SG	from	there	through	go.PRS.INF	to	Your	house

‘I took that road to go to your house’

(c) Path is expressed by means of a dedicated preposition, i.e. (*p*)*pi* ‘through’ (also *pri*, cfr. Rohlfs 1969: 212 < Lat *per* ‘through’). More precisely, (*p*)*pi* expresses both unidirectional and multidirectional path:

(7) *pigghiàu*	***ppi***	*mienzu*	*I*	*tirrina*
take.PST.3SG	through	the midst	the.PL	land.PL

‘I took the road in the midst of the lands’, example in Leone 1995: 52)

(8) (8) *vaiu*	*pì*	*li*	*Strati*
go.PRS.1SG	through	the.PL	road.PL

‘I go throughout the roads’

It is relevant to observe that the multidirectional relation may also be encoded by means of a non-prepositional construction which consists in the doubling of a place noun, such as *strata* 'way, street, road', *casa* 'house, home', expressing the spatial extension along which motion is carried out (Amenta 2010; Todaro 2012; Todaro, Villoing, Gréa forth.).

(9) *Pinu* *firria* *strati* *strati*
Pino go.around.PRS.3SG road.PL road.PL
'Pino is hanging around the streets'

(10) *vai* *caminannu* *casa* *casa*
go.PRS.1SG walk.GER house house
'I'm walking throughout the house'

The second issue addressed concerns the diachronic path through which the system of the spatial relations has developed throughout the history of Sicilian. To this purpose, three electronic corpora have been queried in order to collect a sample of data testifying how the spatial relations - and, in particular, path(s) - are represented at different stages of the language. More specifically, ancient Sicilian (first attested in the 14th century) and modern Sicilian (15th to 19th centuries) data derives from OVI and ARTESIA, while contemporary Sicilian data derives from ALS.

Primary sources:
ALS, Atlante linguistico della Sicilia, Palermo: Centro di studi filologici e linguistici siciliani.
ARTESIA, Archivio testuale del siciliano antico, www.artesia.unict.it
OVI, Opera del vocabolario italiano, www.ovi.cnr.it

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Asymmetries in spatial encodings: Evidence from Indo-European Languages

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Languages differ in their encodings of spatial notions. However, several typological tendencies have been already determined and a number of current linguistic studies strive to specify which notions are salient for each spatial concept (location, direction, source, and path) and which types of linguistic markers are responsible for encoding these spatial ideas and their subtypes. It has been noted that many markers are not limited to denotation of just one spatial notion and extend their semantics to expressing other spatial functions. Location-goal syncretism is the most common case (Nikitina 2008, Shay et al. 2003, van der Zee et al. 2003). This paper examines less-studied semantic relations – a locative[36]-ablative interaction and a locative-perlative association – and identifies tendencies and similarities that these asymmetries exemplify.

Our data comes from the PROIEL corpus (http://foni.uio.no:3000/, http://www.hf.uio.no/ifikk/english/research/projects/proiel/), developed at the University of Oslo, Norway. This source provides a solid parallel corpus of the Greek original of the New Testament and its translations a number of languages (including Latin, Gothic, Classical Armenian, and Old Church Slavic) and offers thorough annotations on the level of morphology, syntax, semantics, and information structure. We take a contrastive approach to spatial concepts: instead of studying interactions within a single language, we examine how four closely related languages encode the concepts in identical situations, thus utilizing the ideas of semantic maps and similarity semantics. This means that we focus on situations where one language has a Source or Path marker, but other languages do not.

The examined data suggests that the meaning 'beyond' is one of the concepts that allow locative-ablative and locative-perlative interactions. Thus, (1) demonstrates that the Greek source marker *apo+Gen*[37] 'from, away from' is rendered with the directional phrase *hindar+Acc* 'behind, beyond' in Gothic.

(1)	Greek	*apelthein*	***apo***	*tōn*	*oriōn*	*autōn*
		depart	**from**	the-GEN	region-GEN	their
	Gothic	*galeiþan*	***hindar***	*markos*	*seinos*	
		go	**beyond**	region-ACC	their	

'to go from (Goth: beyond) their region' (Mark 5:17)

[36] We use the term *locative* in this case to refer to both directional and static locative meanings since the prepositional phrases that are being examined regularly exemplify the location-goal syncretism in the languages in question.

[37] In this paper all prepositional phrases are referred to in the following format: preposition + the case governed. Thus, in this instance, the Greek preposition *apo* governs the genitive case.

The Greek *peran+Gen* presents a borderline case from the start, since it can designate both direction and path. In (2), this Greek phrase marks path, but the Armenian and the Old Church Slavic (OCS) translations answer with the directional constructions *yaynkoys+Gen* and *na onŭ polŭ+Gen*, consequently, both expressing the meaning 'onto the other side of'.

(2) Greek *ēpkhonto* ***peran*** *tēs* *thalassēs* *eis* *Kapharnaoum*
they were going **across** the-GEN sea-GEN to Capernaum
Armenian *gayin* ***yaynkoys*** *covow* *-n*
they were going **onto the other side of** sea-GEN the
i *Kap'arnaowm*
to Capernaum

OCS *ěděaxǫ* ***na*** ***onŭ*** ***polŭ*** *more* *vŭ*
they were going **onto** **other-acc** **side-acc** sea-GEN to
Kapernaumŭ
Capernaum
'they were going across (Arm, OCS: onto the other side of) the sea to Capernaum' (John 6:17)

Such translational ablative-locative (1) and perlative-locative (2) transfers are enabled by two different perspective views that a speaker may have: one that focuses on path 'across, throughout, over' and another that directs attention to the boundaries, limits of this path. Thus, the comparative approach employed in this paper brings out interactions that might have been overlooked otherwise.

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Asymmetries between goal and source prefixes in Spanish: a diachronic account

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The present paper examines an important asymmetry observed in Spanish (and in Romance Languages in general) between the goal prefixes *a-* and *en-*, on the one hand, and the source

prefix *des*-, on the other. The former are not productive in the lexicogenesis of prefixed verbs from verbal stems anymore, being only productive in the creation of new verbs from nouns and adjectives by *parasynthesis* [i.e. the simultaneous adjunction of a prefix and a verbalizing suffix to an existing lexical item; cf. Serrano-Dolader 1995] —vid. examples in (1) and (2). In contrast, the latter displays a high productivity in the creation of new prefixed deverbal verbs, being also productive in the creation of new verbs from nouns and (to a lesser extent) from adjectives by parasynthesis —vid. examples in (3):

(1) a)	*tejer*$_{V}$ 'to weave'	>	*a-tejer$_{V}$	lit. "to-weave"	
b)	*confiar*$_{V}$ 'to trust'	>	*a-confiar$_{V}$	lit. "to-trust"	
c)	*tierra*$_{N}$ 'land'	>	a-terr-ar$_{V}$	lit. "to-land-INF"	'to land'
d)	*bravo*$_{A}$ 'wild'	>	a-brav-ar$_{V}$	lit. "to-wild-INF"	'to excite'
(2) a)	*tejer*$_{V}$ 'to weave'	>	*en-tejer$_{V}$	lit. "in-weave"	
b)	*confiar*$_{V}$ 'to trust'	>	*en-confiar$_{V}$	lit. "in-trust"	
c)	*tierra*$_{N}$ 'land'	>	en-terr-ar$_{V}$	lit. "in-land-INF"	'to bury'
d)	*bravo*$_{A}$ 'wild'	>	em-brav-ecer$_{V}$	lit. "in-wild-INF"	'to infuriate'
(3) a)	*tejer*$_{V}$ 'to weave'	>	des-tejer$_{V}$	lit. "from-weave"	'to unweave'
b)	*confiar*$_{V}$ 'to trust'	>	des-confiar$_{V}$	lit. "from-trust"	'to distrust'
c)	*tierra*$_{N}$ 'land'	>	des-terr-ar$_{V}$	lit. "from-land-INF"	'to banish'
d)	*bravo*$_{A}$ 'wild'	>	des-brav-ar$_{V}$	lit. "from-wild-INF"	'to tame'

From a diachronic standpoint, it can be shown that, regarding the evolution from Latin to Romance, there is a change in the pattern involved in the formation of new verbs by prefixation. In Archaic and Classical Latin prepositional prefixes attached to verbs productively in order to create new predicates expressing directed motion events (cf. García Hernández 1980; Lehmann 1983). Such a system allowed both the goal prefixes *ad*- and *in*- (which are the antecedents of Spanish prefixes *a*- and *en*-, respectively), and the source prefixes *ab*-, *de*-, *dis*- and *ex*- (the last three converging in Spanish prefix *des*-) to express the value of a path which could act as the main predicate of the prefixed verb (cf. Acedo-Matellán & Mateu 2013):

(4) *verto*		'to turn'
a-verto	lit. "away-turn"	'to turn away from'
ad-verto	lit. "to-turn"	'to turn to/toward'
de-verto	lit. "from-turn"	'to turn aside'
di-verto	lit. "different_ways-turn"	'to turn different ways'
e-verto	lit. "out-turn"	'to overturn'
in-verto	lit. "in-turn"	'to invert'

In Late Latin the pattern to create new verbs by prefixation changed from a deverbal to a denominal one (cf. Crocco Galèas & Iacobini 1993; Iacobini 2010), a fact that has been taken as a case of reanalysis (Pujol, in press) and which may be accounted for considering the well-known typological distinction made by Talmy (2000) between satellite-framed languages and verb-framed languages.

In line with Acedo-Matellán (2006) and Acedo-Matellán & Mateu (2013), this study assumes that the change from a satellite-framed system (Latin) to a verb-framed one (Spanish), triggered the reanalysis of prefixed motion verbs as change of state verbs where the prefix does not express a physical Path but an abstract Path of change of state, and the verbal root does not express a Co-event [i.e. an event concomitant to the main event; cf. Talmy 2000] but an abstract Ground [i.e. the reference object of a motion event; cf. Talmy 2000] interpreted as a state. This new derivational pattern is at the base of the preference shown by Spanish dessemantized prefixes for nominal and adjectival bases (which can be easily interpreted as states) over verbal bases. Nevertheless, despite the dessemantization undergone by prefixes in Spanish, the source prefix *des*- felicitously attaches to verbal bases giving rise to new verbs.

One way of approaching the different behaviour of *des*- is by taking into account the crucial distinction made by Di Sciullo & Slabakova (2005) between lexical (or internal) and superlexical (or external) prefixes. The high productivity of the source prefix *des*- in Spanish could be explained assuming that it can function either as a lexical prefix, creating new parasynthetic verbs out of nominal/adjectival bases, or as a superlexical prefix, creating new deverbal verbs with a reversative or negative meaning.

Regardless of the analysis of *des*- as a (super)lexical prefix, this study will show that the different values developed by this prefix in its evolution are all linked to its primary locative meaning of 'movement from a source' (cf. Rodríguez Rosique 2011).

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Directional adverbs and the encoding of path in Danish - a diachronic perspective

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In Danish (as well as Swedish and Norwegian, cf. also English) path is readily encoded using prepositions: *hun rejste til Italien* 'she travelled to Italy'. However, the preposition is often preceded by an adverb, usually a directional adverb: *hun rejste op/ned/over/hjem/… til Italien* 'she travelled up/down/over/home/… to Italy'. A smaller group of about 12-14 adverbs is able to fulfil this specific function of path encoding in Danish, henceforth referred to as Danish directional adverbs, DDA.

As a matter of fact, the adverb - in Talmy's (2000) now classic terminology referred to as a satellite - plays a prominent role: it conveys important spatial information about the path; it receives stress in complex predicates and is, thus, highlighted prosodically as well as attentionally compared to the preposition (cf. Harder et al. 1996); and last, it has different forms and enters into a small paradigm that encodes aspectual semantics:

(1) *hun rejste ned-Ø til Italien* 'she travelled down to Italy' (dynamic)

(2) *han er ned-e i gården* 'he is down in the courtyard' (static)

(3) *vandet løber ned-ad mod huset* 'the water is running downwards towards the house' (progressive)

This means that Danish explicitly (contrary to English) encodes a distinction between dynamic and static (and progressive) states of affairs in the satellite (cf. Harder et al. 1996, Hovmark 2013). Within a cognitive linguistic framework a common base conceptualizing a goal-oriented transition from p to q, a path event frame (cf. Talmy 2000), can be presupposed for all forms in the paradigm. For instance: the relationship between the dynamic and the static DDA can be compared with the derivational and causal/force-dynamic relationship between *break* and *broken* (cf. Langacker 1998; cf. also Croft 2012): *børnene gik ind-Ø i huset* (kl. 10) *og er nu ind-e i huset* (kl. 10+) 'the children walked into the house (at 10 o'clock) [profiling of the full transition from p to q] and are now inside the house (at 10+ o'clock) [profiling of the end-point or the resultative state of the transition from p to q]' (cf. Hansen 1980).

In this presentation I focus on the development of static forms and the establishing of a stative-locative paradigmatic encoding. The double encoding of path in DDA + PREP and the development of static forms date back to Old Norse (cf. Falk & Torp 1900:109f.). The "original" DDAs were directional adverbs that added a case-like suffix -i (> -e) encoding locative: *inni*, *úti*, *uppi*, *niðri*, *frammi*. *bortæ* 'away' and *heima* 'home' also have locative elements, but slightly special etymologies. Later, from about 1300-, but especially in early Modern Danish from about 1600-, a number of prepositions (and the adverb *hen* '[in horizontal direction]') entered the

paradigm by analogy. However, not with equal success: *fra(e)* 'off' and especially *af(e)* 'off' developed early and have been widely used in spoken language until recently; *over/ovre* 'over/across' and *om(me)* 'around' came later but gained full access to not only spoken but also written Danish; *på(e)* 'on', *i(e)* 'in' and *forbi(e)* 'past' are only attested in dialects from the 19th century.

However, I also wish to discuss why some prepositions had more success than others, a development hitherto described as arbitrary or haphazard (Pedersen 2001). In particular I wish to discuss if the cognitive linguistic approach above, i.e. an analysis of the instructional semantic constraints (cf. Harder 2007) in the basic path event frame and in the different prepositions, provides an explanation: do some of the prepositions fit better than others into the paradigm (the path event frame) and its conceptual structure and constraints?

I suggest that the prepositions do cluster according to how well they go together with the basic semantics in the path event frame, especially the encoding of transition or change of state. For instance: prepositions that are dynamic and imply a transition or passing of a boundary of some kind: *fra(e)* 'off' and *af(e)* 'off'; *over/ovre* 'over/across' and *om(me)* 'around' - have much greater success than prepositions that are neutral with respect to dynamicity or are considered to be static or purely locative rather than dynamic: *på(e)* 'on', *i(e)* 'in'. On one hand *fra(e)* 'off' and *af(e)* 'off' prompt the incorporation of their opposites *på(e)* 'on', *i(e)* 'in' into the paradigm (cf. that the paradigm tends to favour oppositional pairs: *op-ned* 'up-down' etc.); on the other hand the basic logic in the development of the paradigm is one of dynamic forms getting a derivative static form, and this runs counter to the fact that *på(e)* 'on', *i(e)* 'in' are primarily thought of as static, and in any case able to function as both dynamic and static. However, the cognitive-instructional approach is not able to account for all the developments: the preposition *forbi(e)* 'past' would seem to align with the constraints in *over/ovre* 'over/across' and *om(me)* 'around' (passing of a boundary or point), but it never gained proper access to the paradigm. Thus, other explanatory factors should be considered along with more detailed studies of each preposition.

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How should a "classical" Satellite-Framed Language behave? Path encoding asymmetries in Ancient Greek and Latin from a diachronic perspective

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In this paper, we describe the factors of variation displayed by two languages belonging to the Satellite-Framed type, Ancient Greek and Latin, with respect to Talmy's two-way typology (2000). From a diachronic perspective, we account for some phenomena driving the typological shift from Satellite-Framed towards Verb-Framed languages.

Our presentation is based on a *corpus* analysis of the occurrences of dislocational motion collected from literary texts (both in prose and in verses) in Ancient Greek and Latin, compared to the translations into their VF daughter languages, Modern Greek and Italian. The texts we selected for our *corpus* are Herodotus' *Histories*, Thucydides' *History of the Peloponnesian war*, Aristophanes' *Birds* and Euripides' *Bacchae* (5th century b. C.) for Ancient Greek, Caesar's *Gallic Wars* (1st century b. C.) and Ovidius' *Metamorphoses* (1st century A. D.) for Latin.

As for the labeling of the data, we used a coding grid adapted from Fortis & Vittrant (2011), which combines the morphological and the semantic information, highlighting, on one hand, the most frequent constructions in the language, on the other, the main sub-components of Path (i.e. spatial orientation, deictic anchoring and boundary crossing), as well as their *locus* of encoding.

Our provisional results allow us to adopt a methodological stance: an investigation of the resources offered by the language system is not a sufficient condition to provide a suitable description of the strategies (preferentially) used in a language to express dislocational motion (hence to obtain a proper typological classification). In fact, although Ancient Greek and Latin belong to the same SF macro-type and display similar inventories of linguistic items for the encoding of motion events, the investigation of the preferred strategies employed by the two languages shows substantial and interesting variation at both intra- and cross-linguistic level.

Path is conceived differently according to the grounds which delimit a vector at both ends (Source, Goal). As shown by several works starting from Ikegami (1987), not all Path ending points are equally expressed. In Source and Goal encoding, languages show a general tendency

to give preferential attention to Goals compared to Sources of motion.

Classical Latin shows an interesting kind of asymmetry in the expression of Ground, i. e. a gap between system and usage: a rich inventory of linguistic resources in Source encoding (preverbs, prepositions, case markers) coexists with a higher frequency of Goal expressions.

Our analysis shows that Latin shares some features of the VF languages, such a as a low degree of Manner salience. Even when a manner verb could fit the context, a directional verb is preferred – *flumina iam lactis, iam flumina nectaris* ***ibant*** [Ov. Met. I.111] *vs.* ***fluebant***.

In Classical Latin, we can observe some other unusual features for a SF language: elaborated Paths are generally not expressed (for the notion of elaborated path, see Slobin 2005). When reinforced by prepositional phrases, preverbs coincide with prepositions or, at least, encode the same portion of Path expressed in the adnominal *locus* (*quae* ***ex****it* ***ex*** *ore;* ***ad*** *Galbam* ***ad****currunt*).

We suggest that the tendency not to express elaborated paths could represent an outstanding feature in the emergence of VF encoding strategies. In Romance, the importance of verbal roots in Path expression is strengthened by the semantic development of *eo*/*venio* in their andative/venitive outcome, in addition to other phenomena described in previous literature (such as the formal and semantic bleaching of directional prefixes and the loss of distinction between directional and locative PP).

As in Latin, in Ancient Greek too, the encoding of Path is rarely committed to a single morpho-lexical item: within the same clause, rather it is often distributed between the adverbal and the adnominal *locus*.

However, with respect to Latin, Ancient Greek seems to be proner to express elaborated paths, either through the combination of satellite preverbs and adpositions, which can refer to different portion of Path (**ἀπ**ῆλθε **ἐς** τὰς Σάρδις); (ῥέων **ἀπὸ** μεσαμβρίης **μεταξὺ** Συρίων τε καὶ Παφλαγόνων **ἐξιεῖ πρὸς** βορέην ἄνεμον **ἐς** τὸν Εὔξεινον καλεόμενον πόντον), or through the less stable strategy of multiple preverbation (***ἐσαπ***ικνέεσθαι καὶ δὴ καὶ **ἐς** Ἄργος; ***ὑπεκ***δύς). When more than one preverb is attached to a verbal root, which is not rare in Classical Greek, the two satellites are likely to further specify the direction of motion.

Unlike in other SF languages, in Ancient Greek, Manner is not particularly salient (the information about the kind of motion performed by the Figure tends to be omitted when it is inferable from the context); nevertheless it can be encoded outside the verbal root (δευρὶ γὰρ ἐσβὰς **αὐτίκα** μάλ᾽ ἐς τὴν λόχμην).

In the final section of our talk, we will compare the typological change in the encoding of motion events from Latin to Italian, to the one undergone by Ancient Greek in its evolution towards Modern Greek. Specifically, we will discuss the hypothesis according to which the non-complexity of Path could represent the starting point of such a typological shift. We will exploit the differences between Ancient Greek and Latin, in order to analyze which linguistic phenomena or constructions employed for the expression of Path could have played a crucial role in the typological change from a S-F to a V-F language.

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Source-Goal asymmetry in diachrony: evidence from Asia Minor Greek

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Recent literature has demonstrated that Goals and Sources behave asymmetrically at both the linguistic and the non-linguistic level (see, inter alios, Ikegami 1987; Lakusta & Landau 2005; Kabata 2013). In most studies, the wheel shows a clear preference and spins towards the endpoint of motion. However, a growing body of research has started to challenge the pervasiveness of Goal prevalence, showing that the manifestation of the phenomenon is not ubiquitous across languages (inter alios Kopecka & Narasimhan, eds. 2012). Thus, whether a particular language prefers Goals over other portions of the PATH schema is an open empirical question, which needs to be tested. This article takes up this challenge by analyzing Ancient Greek motion events from a semantic, syntactic and morphological perspective.

The data used in this investigation stem from a tailor-made special-purpose historical corpus constructed by myself and cover two different stages of Greek, namely Homeric and Classical Greek. The corpus comprises 32 works from various text types and contains approximately 550,000 words. The focus is mostly on the following verbs of inherently directed motion:

Directional verbs
eîmi/ érkhomai (‘come, go’)
pheúgō (‘leave, flee, take flight, escape’) / leípō, ekleípō (‘leave’)
aphiknéomai/ hiknéomai (‘arrive’)

I first test the hypothesis that the specific frame each verb evokes influences the choice of the spatial complement (*H1*). The corpus investigation reveals that the lexical semantics of the verb plays a major role in the choice of the spatial expression. Goal-oriented verbs (e.g., *aphiknéomai*) co-occur more frequently with Goal spatial expressions and Source-oriented verbs (e.g., *leípō*) co-occur more frequently with Source spatial expressions. This finding is consistent with similar results from corpus studies in other languages (Stefanowitsch & Rohde 2004).

I subsequently examine the hypothesis that Source-oriented verbs co-occurring with a spatial expression that denotes the Goal are more frequent than Goal-oriented verbs co-occurring with a spatial expression that denotes the Source: V_{SOURCE}, SP_{GOAL} > V_{GOAL}, SP_{SOURCE} (*H2*). This hypothesis is formulated on the assumption that an equal basis of comparison is ensured when a sentence contains both the Goal and the Source. A significant difference in the distribution of spatial expressions would then reflect the priority of the one PATH element over the other. It is shown that the V_{SOURCE}, SP_{GOAL} pattern is more frequent than the V_{GOAL}, SP_{SOURCE}, supporting the prevalence of the Goal over the Source.

I further detect instances whereby a Goal marker stands in the place of a Source marker, which one would expect under the Goal-over-Source-predominance hypothesis (see Ikegami 1987). Consider, for instance, the use of the accusative (a marker that can be found in Goal relations; see [1]) with verbs associated with the concepts of “removing” or “depriving” (see [2]), although the verbs belonging in this semantic field “require” a complement with an ablative value (see the “normal” use in [3]).

(1) Polloì **ísan** Anéres hēméteron **dô**/
many:NOM.PL.M *go:3PL.AOR* *man:NOM.PL.M* *POSS.1SG.ACC.SG.N* *house:ACC.SG.N*

Álloi
INDEF.NOM.PL
‘Many were the men who came to our house as strangers’ (Homer, *Od.* 1.176-177)

(2) hōs **ém’** **Aphaireîtai** Khrusēída Phoîbos
as 1SG.ACC *take.away:3SG.M/* *daughter_of_Chryses:ACC.SG* *Phoebus:NOM.SG*

P

'*As Phoebus Apollo takes from me the daughter of Chryses***'** (Hom., *Il.* 1.182)

Apóllōn
Apollo:NOM.SG

'*As Phoebus Apollo takes from me the daughter of Chryses***'** (Hom., *Il.* 1.182)

(3) oud' ár' ét' Álla dunḗsato Teúkhea
NEG PTC PTC INDEF.N/A.PL can:AOR.MID.3SG armour:ACC.PL.N

kalà/ **ṓmoiin** **Aphelésthai**
good:ACC.PL.N shoulder:GEN.DU.M take:INF.AOR.MID

'yet could he not prevail likewise to strip the rest of the fair armour from his shoulders' (Hom. *Il.* 13.510-511)

I finally deal with diachronic mergers of Goal—Place and Source—Place, focusing on deictic adverbs in Classical Greek (cf. Mackenzie 1978). The Greek data indicate that Goal and Place markers share the same form, whereas Source is being kept distinct. For example, *éntha* (originally 'here') and *énthade* (originally 'hither') can denote both place where (Place) and place whither (Goal), while *énthen* (originally 'thence') denotes only place whence (Source). It should be kept in mind that in Ancient Greek we encounter many cases of Source-to-Place transfers (see Mackenzie 1978; Nikitina & Spano 2014). However, what is relevant to the question of the Source-Goal asymmetry is the fact that Source-Place polysemy tends to be avoided (Luraghi & Nikitina 2015).

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Referring to Source and Goal in Old and Modern French

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This presentation investigates the description of motion events in Old and Modern French to explore how French expresses Source (the initial portion) and Goal (the final portion) of motion at two different time periods.

Previous research has shown that there is a bias towards the Goal over the Source, and that languages tend to express the Goal more frequently and in a more detailed fashion in discourse than the Source (e.g., Bourdin 1987, Ikegami 1987, Lakusta & Landau 2005, Regier & Zheng 2007). This preference given to the Goal was largely attributed to its cognitive and pragmatic salience, namely when human motion is involved the Goal is more important than the Source and, hence, attracts our attention. Yet despite numerous studies on motion across languages the role of language-specific characteristics in the expression of Sources and Goals has not been the subject of much study and we still know relatively little about the relationship between typological properties of individual languages and the asymmetry between these two portions of Path.

French affords an interesting case for such a study for diachronic reasons. Old French had several micro-systems for expressing Path of motion, including verbs, verb prefixes, verb particles, adverbs and prepositions. Verb satellites (i.e. prefixes and particles) were the main tools used to convey the meaning of initial and final portions of Path, as it is shown in the example (1) where Path is expressed by the particle *fors* 'out'.

(1) Old French (In Leclanche 2003: 168)
Guillaumes ***fors*** *de la chanbre ist,*
'Guillaume went out of the room,
Onques point de congié ne pris.
without having taken leave.'

However, like other Romance languages, French has evolved from the satellite-framed type wherein Path of motion is preferentially expressed in a verb satellite to a verb-framed type wherein Path is preferentially expressed in the verb, as in the example (2).

(2) Modern French (In Leclanche, 2003, p.169)
Guillaume ***sortit*** *de la chambre*
'Guillaume went out of the room
sans prendre congé.
without taking leave.'

Given this structural reorganization of spatial information, the question that arises is what are the consequences of this typological change on the expression of Sources and Goals? To explore this question, I present a comparative text-based study of motion events based on translations of short narratives from Old to Modern French and examine how Sources and Goals are described in medieval narratives and their contemporary translations. I investigate morphosyntactic resources used to describe Path and discuss similarities and differences between Old and Modern French in the expression of Sources and Goals. The study shows that the availability of verb satellites and their relatively free combinability with verbs of motion in Old French allowed for a more frequent and fine-grained expression of Path components, including both Sources and Goals; in contrast, Modern French tends to put more emphasis on final points, leaving the initial points to be inferred from context.

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Asymmetrical biases in the usage of the German spatial expression *Richtung* 'direction'

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In Present-Day German, the noun *Richtung* f. ‘direction; orientation; route’ is frequently found in adverbial usage and here especially in the goal-oriented, prepositional phrase *in Richtung* ‘in (the) direction of; towards’. This usage is illustrated in the following example from the DWDS[38]:

(1)*Blickt man über die wogenden Hügel* ***in Richtung*** *Adria, kann man von hier*
look one across the undulating hills in direction Adriatic can one from here

aus an klaren Tagen die Berge Dalmatiens erkennen.
(out) on clear days the mountains of Dalmatia discern

‘If one looks across the undulating hills in the direction of / towards the Adriatic (Sea), one can from here on clear days discern the mountains of Dalmatia.’ (DWDS, Die Zeit, 05/14/2014)

Interestingly, although by no means surprisingly, the form is not dedicated to the expression of spatial relations alone; it is polysemous in both adverbial and NP function and is in many contexts interpreted with a nonspatial, metaphorical meaning (cf. example 2).

(2) *Er fühlte danach irgendetwas* ***in Richtung*** *seines Herzens.*
he felt afterwards something in direction of his heart
‘He afterwards felt something in the direction of (near) his heart.’ (DWDS, Kernkorpus 20)

There are two types of asymmetrical biases in usage which, in the light of the present work-shop’s theme, are of special interest. The first bias relates to the usage of *Richtung* in adverbial function and the difference between spatial and nonspatial readings. While in its nonspatial function, the form is equally available in the constructional frames [*die Richtung*$_{NP}$ + Gen/Dat] and [*in (die) Richtung*$_{Prep}$ + Gen/Dat], it is scarcely ever used in constructions where *Richtung* has prepositional status even without the core preposition *in* ‘in’ (e.g., ~~*in*~~ *Richtung Bahnhof* ‘towards the station’, ~~*in*~~ *Richtung Süden* ‘towards (the) south’ etc.). This bias of using the nominal form as sole goal-orientated prepositional phrase is very clearly reserved for the spatial relation and goes along with a wide spectrum of verbal collocations (cf. analysis of the DWDS word profile).

The second bias also relates to the first bias, however, focuses on the relational meaning of *Richtung* within the spatial domain. Thus, interestingly, the form is not only reserved for goal-oriented readings, but may also be used with the source-oriented preposition *aus* ‘out; from’. This is again illustrated by the following example from the DWDS (Die Zeit, 05/25/2009):

(3) *Dann bricht* ***aus Richtung*** *Nordsee die Abendsonne durch.*
then breaks from direction North Sea the evening sun through
‘Then the evening sun breaks through from (the) direction (of the) North Sea.’

[38] *Digitales Wörterbuch der deutschen Sprache* [= Digital Dictionary of the German Language]

A clear difference between this source-oriented usage and the goal-oriented usage illustrated before is that the former can never be evoked without the additional preposition *aus* specifying the orientation towards some source. In other words, only the goal-oriented meaning has become encoded by the simple prepositional phrase *Richtung* ('towards'), while the source-oriented interpretation always relies on the complex prepositional phrase *aus Richtung* (lit. 'from direction').

The aim of this presentation is to consider in particular two different hypotheses regarding the motivation and origin of these two described biases. With respect to the first asymmetry bias relating to the spatial-nonspatial dichotomy, I will pursue the hypothesis that frequency in usage can explain the selective compression of the adverbial construction in the spatial domain only. In this context, I will present evidence to the fact that although the nonspatial reading is available in the adverbial function, it is more frequently linked to a constructional frame involving modifying expressions [*in* [+ modifier] *Richtung*] than one in which *Richtung* is treated as part of the prepositional phrase followed by a prepositional complement [*in Richtung* + Complement].

With respect to the second bias, I argue that frequency, again, can explain part of the phenomenon, namely the asymmetrical usage of *Richtung*$_{\text{Prep}}$ in favor of the goal-oriented interpretation only. However, I will also include further considerations relating to the diachrony of the nominal expression *Richtung*. The emergence of this form can be reconstructed to the second half of the 18th century, and its meaning basis can be reconstructed even further with reference to its underlying verb stem *richten* 'to set something straight; to orientate something (towards)'. Based on this etymological reconstruction, I will argue that the historical context under which the form first acquired directional (spatial) meaning naturally brings with it an orientation towards goals rather than sources. On this basis, I will then conclude – along the lines of Svorou (2002) – that the inherent semantics of a form is a critical intertial force influencing its applicability to different spatial relations and that these may only eventually be overcome at later stages of development. It is significant to observe (reconstruct) in this context that the adverbial/prepositional usage of German *Richtung* has only really become a prominent usage pattern since the beginning of the last (20th) century. This may have been the critical development which allowed its further extension into the source-oriented domain.

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English source-oriented directional particles: shifts over the Modern English period

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The present paper reports on a corpus-based investigation of the evolution of some English source-oriented directional particles over the Modern English (NE) period in the light of recent work on the expression of motion events.

English has a well-known set of spatial particles (Ps) (*up, down, along, across, into, out, over, away,* etc.) which combine with motion verbs (*come, go, move,* etc.) or conflated motion/manner of motion verbs (*run, walk, fly, jump, trudge,* etc.) to express directed motion, both self-motion and caused motion. In a typological approach to motion event constructions, Talmy (1985, 2000) has characterised English as a 'satellite-framed' language (by contrast with 'verb-framed' languages, where the verb conflates motion and direction), identifying its directional particles as belonging to a wider typological category of directional morphemes he terms 'satellites'. This notion of 'satellite' has been variously refined (e.g. Croft et al 2010, Fortis and Vittrant 2011) into a useful typological category: a satellite is identified by a combination of syntactic (language-specific) and semantic (universal) criteria. But although the English 'satellites' appear to form a set or paradigm, each has its own history and there is considerable variation in usage.

One issue is whether and in what ways English motion-event P-constructions reveal the source-goal assymetry attested for many languages. A cognitive goal-bias is said to result in more frequent expression of goal than source (v. findings of Stefanowitsch and Rohde 2004), resulting in more grammaticalized expression of goal-oriented events in the language. And the attentional bias to goal, resulting in finer-grained perception, may be reflected in a wider and more specific set of expressions for coding goal (Papafragou 2010).

This study focuses on the source-oriented particles *away*, *out* and *off*, with a finer-grained account of *away*. All three particles date back to Old English (*aweg, ut, of*) and appear to have changed little over the centuries. The most obvious and well-documented development has been the rise in aspectual uses, leading to multiple polysemies, while the spatial uses have remained remarkably stable. The present analysis is designed to address two main questions: first, whether, despite the apparent long-term stability of these particles, any regular pattern of change can be discerned, and second, if so, what mechanisms seem to have been instrumental in the evolution of the particles, such as analogy (paradigmatic pressure for regularization) or 'linear fusion' (syntagmatic pressure which might lead to lexicalizations or idiomatization). More generally, evidence is sought of any possible regularization among source-oriented particles or within the wider 'set' of directional particles.

Data are taken from a diachronic corpus of formal and informal registers of English from the mid sixteenth century to the mid twentieth century, and from corpora of present-day spoken and written English. The analysis focuses on the motion event constructions: the verbs, the PPs when present, and the event types of the clauses containing the particles under study in both self-motion and caused motion.

Over the NE period, no radical change is evidenced in the token frequencies and constructions of the three particles. But there is evidence of ongoing shift.

Away is itself a lexicalization from the path expression *onweg* ('in via'), and by the early NE period functions as a 'pure' directional coding movement from a source or deictic centre. During the NE period, overall frequency of spatial *away* is relatively stable, increasing a little in

the nineteenth century and decreasing again in the twentieth back to earlier levels. But the functional splits it has been undergoing suggest that it is losing autonomy and declining in productivity. First, a locative use develops; the proportion of locative uses increases steadily throughout the nineteenth and early twentieth centuries. Second, *away* seems to decline in productivity in its directional use, insofar as it occurs largely in semi-lexicalized V+*away* constructions (phrasal verbs). In both self-motion and caused motion, four or five verbs come to account for over half of occurrences. Third, *away* seems to be giving way in certain context types to *off*, which shows increased frequency with motion verbs over the period. Arguably, *out* begins (later) to undergo a similar evolution to *away*. Overall, *away* seems to be the most 'advanced' of the three particles, with evidence of functional split into idiomatized intransitive and transitive phrasal verbs such as *run away*, *go away*, *take away* on the one hand, and locative uses on the other. Arguably it shows some incipient fossilization, and is turning into a more 'peripheral' satellite. Such changes are consistent with frequency-adjacency effects and context-induced pragmatic inferencing, as well as possible sociolinguistic factors.

The wider picture of *away, out* and *off* as a source-oriented 'set' is clouded by dialectal variation. The three-way distinction between spatial Ps that occur only as adverbial particles, those that occur only as prepositions and those which occur as both goes back to Old English (Hiltunen 1983). (There has been a great deal of discussion of the syntactic status of the present-day English Ps, especially since Bolinger 1971 coined the term 'adprep', but we will maintain the adverbial particle / preposition distinction and eschew the 'intransitive preposition' analysis (cf. Cappelle 2005). A partial assymetry is apparent in Standard English, and in many other dialects too, whereby source-oriented Ps are more likely to be adverbial. *To*, the most frequent goal-oriented P, is now almost exclusively prepositional, occurring as an adverbial particle only in restricted, fossilized contexts (*Push the door to*, etc). By contrast, *away* still occurs only as an adverbial particle, never as a preposition. *Out* varies among dialects: adverbial only, like *away*, in standard British English (with *outside* for locative), but prepositional too in many American varieties. *Off* also varies, *off of* functioning analagously with *out of* in the fifteenth and sixteenth centuries and surviving today in many dialects, although not in the standard that emerged in the seventeenth century. A futher indication of marginality and perhaps goal bias is the observation in the data that *away to* is almost as frequent as *away from*. We had hypothesized that *away from* might be coalescing into a complex preposition (cf. Hoffmann 2005), but did not find evidence for this. Our data are consistent with the hypothesis that overall the source-oriented particles have remained less grammaticalized than those of goal, but a broader database that included more varieties and genres could shed more light on this question.

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Ablative and allative marking of static locations: a historical perspective

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While synchronic differences in the encoding of sources and goals of motion have drawn considerable attention (Stefanowitch & Rohde 2004, Lakusta & Landau 2005, inter alia), relatively little is known about the diachronic aspects of that asymmetry, apart from the fact that locative markers often derive from originally ablative expressions (cf., e.g., Ancient Greek *ópisthen* 'behind', going back to an ablative adverb). Etymological relationships of this kind have been commonly described in terms of ablative-locative "transfers", implying that an originally ablative expression, used to describe sources of motion, underwent a semantic change and was later used as a regular locative expression, independent of any motion. Goals of motion, on the other hand, are not characterized by such an intimate diachronic relationship with static locations; they are, however, systematically encoded in the same way as static locations in a relatively large number of languages, cf. US English *jump in/into the water* (Nikitina 2009, Zwarts 2010). This paper explores the asymmetry in the diachronic behavior of Goals and Sources with respect to the encoding of static locations, relating that asymmetry to general tendencies in the grammaticalization of spatial relators.

Cross-linguistically, two major strategies are employed in the encoding of spatial relations. Specialized spatial relators are commonly used to locate the Figure in a region of space defined with respect to the Ground; e.g., the prepositional phrase *above the table* relates the Figure's location to an area of space superior to the Ground in terms of the gravitational axis. Alternatively, a spatial region may be projected from a reference point by specifying direction of

fictive motion (e.g., <u>*upward*</u> *from the table* or *two inches* <u>*from the top*</u> <u>*part*</u> *of the table*). The latter strategy does not rely on a specialized preposition, but rather refers to an abstract direction (with a directional adverb or an allative expression, cf. *upward* or <u>*to*</u> *the south*) or the Ground's internal part (with an ablative, cf. <u>*from*</u> *the top part of the table*). The "projecting" strategy is characteristic of ancient Indo-European languages; the examples in (1)-(2) illustrate it for Ancient Greek: the ablative encoding is restricted to cases where the reference point is an independent object or an object part, cf. "left hand" in (1); the allative encoding appears in examples referring to abstract directions, such as "right" in (2), without reference to any objects:

(1) *dúnatai* *dè* *toûto* *tò* *épos* *katà*
signify:PRES.3SG PRT this:NOM ART:NOM.SG word:NOM following
tḕn *hellḗnōn* *glôssan* *hoi* ***eks*** ***aristerês***
ART:ACC.SG Greeks:GEN language:ACC ART:NOM.PL from left:GEN
xeiròs *paristámenoi* *basiléï* (Hdt. *Hist*. 2.30.5)
hand:GEN stand.by:PRTC.PRES.NOM.PL king:DAT
'This word means in Greek "those standing on the <u>left hand</u> of the king".'

(2) *tôn* *ho* *mèn* *xrúseos* *ékeito*
them:GEN ART:NOM.SG PRT golden:NOM.SG lie:IMPF.MP.3SG
epì ***deksià*** *esiónti* *es* *tón*
on right:AC enter:PRTC.PRES.DAT.SG into ART:ACC.SG
nēón, *ho* *dè* *argúreos* ***ep'*** ***aristerá***
temple:ACC ART:NOM.SG PRT silver:NOM.SG on left:ACC
(Hdt. *Hist*. 1.51.4)
'Of them the golden one was located on <u>the right</u> to one entering the temple, the silver one on <u>the left</u>.'

Based on data from several ancient languages and their descendants, I argue that Indo-European languages have been undergoing a shift from the "projecting" strategy, still reflected in the etymology of many spatial adpositions, to the use of prepositions that refer directly to regions of space adjacent to the Ground. The development is driven by two major tendencies in the grammaticalization of spatial terms. On the one hand, frequent combinations of prepositions and nouns tend to become lexicalized, yielding synchronically non-decomposable prepositions. Consistent with this change, some originally projecting expressions – primarily those referring to object parts – become lexicalized as new static prepositions, leading to seeming ablative-locative transfers.

On the other hand, terms referring to object parts are known to gradually extend their reference to include regions of space projected from these parts (Svorou 1993), and may further develop into markers of abstract directions that are defined without reference to any object parts (e.g., terms for 'top' may develop into cardinal direction terms for 'north', cf. Brown 1983; Comrie 2003). As object part terms develop into markers of abstract directions, ablative expressions are replaced by allative ones; e.g., Russian *ot severa* 'from the north' is replaced in the contemporary language by *k severu* 'to the north', reflecting the reinterpretation of the term for north as an abstract direction point rather than a reference object (the region surrounding the northern pole).

As the projecting strategy is gradually replaced by the use of specialized prepositions, it can still survive in the encoding of "marginal" spatial relations. These are, first of all, some of the less frequent spatial relations such as "left-right" and "north-south" (cf. English *to the left* or German *zu Linken*, which can be used in static descriptions as well as in descriptions involving motion). Secondly, the projecting encoding tends to survive when reference is made to the entire reference object, i.e. the relation is not frequent enough to undergo grammaticalization (cf. English *inches from/??to my hand*, Ancient Greek *tò ek toû isthmoû teîxos* 'the wall closest to the isthmus', literally "the wall from the isthmus").

The proposed account captures the mechanism of change that is responsible for the gradual shift from directional adverbials to static prepositions as a major means of encoding spatial relations in Indo-European languages. It explains why both source and goal marking are used to describe primarily those static locations for which no primary adposition exists. It also explains the asymmetry in the "transfer" potential of expressions for goals and sources: as expressions for sources refer to intrinsic object parts, they are more likely to become reanalyzed as locative prepositions. In this sense, general tendencies in grammaticalization predict an asymmetry in the development of source and goal expressions into static spatial relators.

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Spatial interrogatives: typology and dynamics

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The extant linguistic accounts of spatial relations are mainly based on the analysis of evidence from declarative sentences (e.g. Lestrade 2010, Pantcheva 2011, Stolz/Lestrade/Stolz 2014). This focus holds not only for synchrony but also for diachrony (Mackenzie 1978). We assume that an important piece of evidence has hitherto been neglected, namely the system and dynamics of spatial interrogatives. Spatial interrogatives are constructions which serve the purpose of inquiring into the whereabouts of an entity (question about PLACE = WHERE), the destination of a motion event (question about GOAL = WHITHER), and the starting point of a motion event (question about SOURCE = WHENCE). In the literature on questions and interrogativity, spatial interrogatives have not been featured prominently (Siemund 2001, König/Siemund 2007, Cysouw 2007). Therefore the typology and the dynamics of systems of spatial interrogatives are largely *terra incognita*. Our talk is intended to demonstrate that

a) the linguistics of spatial relations can gain important insights from the in-depth study of spatial interrogatives,
b) the expressions of WHERE, WHITHER, WHENCE constitute a functionally and formally defined paradigm,
c) there are typologically relevant patterns of the distribution of certain properties of spatial interrogatives (giving evidence of a degree of areality),
d) interesting diachronic processes can be observed which contribute to the shaping and reshaping of the systems of spatial interrogatives.

We further assume that the evaluation of a) – d) will shed light on at least some of the hotly debated issues of the grammar of space in general.

The hypotheses which we put forward in this talk are based on the analysis of data from 250 languages from all continents. Since the documented history of the majority of our sample languages is characterized by a severely limited time-depth we will discuss diachronic evidence from a small selection of languages which boast a sufficiently long history of documentation. One of our showcases is connected to the history of the spatial interrogatives of the modern Romance languages. Their common ancestor Latin displays a paradigm of spatial interrogatives which gives evidence of suppletion and overabundance. Table 1 shows how the original paradigm changed over time so that both of the morphological mismatches (according to the model of Corbett 2007) were affected. At the same time the processes of change yield a potentially defective paradigm.

spatial relation	Before	after
Place	~~*quā*~~ ~ *ubi* →	*ubi*
Goal	~~*Quō*~~	(gap?)
Source	*unde* →	*unde*

Table 1 "Survival of the fittest" – changes of the Latin paradigm of spatial interrogatives prior to the emergence of the individual Romance varieties

Interestingly, the Romance languages have restructured the inherited paradigm in different ways. Some of the languages have generalized the spatial interrogative of PLACE =

WHERE to become the common stem of all members of the paradigm. The result of this process can be illustrated by e.g. French *où* 'where', *où* 'whither', *d où* 'whence'. Others however show the spatial interrogative of SOURCE = WHENCE in the same role. In these cases the erstwhile WHENCE has been reinterpreted as WHERE – sometimes repeatedly (Mackenzie 1978: 143-4). On the basis of the new WHERE equally new expressions of WHITHER and WHENCE have been created as in Galician *onde* 'where', *para onde ~ a onde* 'whither', *de onde* 'whence'. We will discuss the evidence from Romance and sundry languages with reference to Mackenzie's (1978) notion of "ablative-locative transfers". We will conclude with a proposal for the integration of spatial interrogatives into the general framework of the linguistics of space.

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Locative constructions and the genealogical differentiation of the Afro-Caribbean English-lexifier Creoles

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This talk aims to provide a typologically informed comparative analysis of locative constructions in the African and the Caribbean branches of the Afro-Caribbean English-lexifier Creoles (henceforth AECs). The analysis is based on primary data collected in West Africa

(Ghana, Nigeria, Cameroon, Equatorial Guinea), and the Caribbean (Jamaica, Barbados, Trinidad and Tobago, Suriname). A second objective is to account for the genealogical differentiation of this young linguistic family that arose in the 17th century (cf. e.g. Hancock 1987; Smith 2015) by focusing on a specific functional domain: There are marked typological differences in the way spatial relations are expressed between (a) the attested African substrates and adstrates of the AECs (chiefly languages of the Volta-Congo linguistic phylum of Africa), and (b) the AECs' lexifier language English. The following points summarize the distinctive characteristics:

1. The use of general locative prepositions in static (Place) and dynamic (Goal, Source and Path) spatial descriptions in the (a) languages above. In English (b), there is no general locative preposition. Instead we find a large number of prepositions specialized to the expression of specific topological relations of Place (e.g. at, on, in) and others that incorporate dynamic senses of Goal, Source and Path (e.g. to, from, through).
2. The use of (pre- or postpositional) relator nouns expressing the Region or Search Domain, as a default strategy in the (a) languages above. In contrast, English does not employ relator nouns by default, but only when a high degree of specificity is desired.
3. The use of serial verb constructions together with general locative prepositions and relator nouns in descriptions of motion events in the (a) languages. English makes exclusive use of monoverbal constructions and Goal, Source or Path conflating prepositions.

Individual AECs vary in the degree to which they make use of typologically more "African" versus more English or "European" locative constructions. For example, the Surinamese Creole Ndyuka has Source-oriented constructions like (1), which are isomorphic with corresponding Ewe substrate constructions like (2). The common characteristics of the Ndyuka and Ewe constructions are the use of a general locative preposition (the first element in bold) and the simultaneous presence of a postpositional relator noun expressing the Region (the second element in bold), which functions as the head to the Ground in a possessive construction (source of examples (1)-(4): field data):

(1) a man puu a koosi **ne** a dosu **ini**.
DEF.SG man remove DEF.SG clothing LOC DEF.SG box containing.region
'The man took the piece of clothing from the box.' (Ndyuka, Suriname)

(2) ŋutsu-la tsɔ awu **le** aɖaka **me**.
man-DEF take clothing LOC box containing.region
'The man took the piece of clothing from the box.' (Ewe, Ghana)

I hypothesize that the degree to which an individual AECs leans towards the African or European pole in the types of locative constructions found in the language reflects the intensity and duration of exposure of the language to (1) African substrates and adstrates, (2) English, or (3) other European languages in places where the colonial official language has never been or not been English for a long time (e.g. Dutch in Suriname, Spanish in Equatorial Guinea).

Hence in the AEC Pichi, we find Source-oriented locative constructions of the European type like (3) next to African ones like (4):

(3) è pul dì klos frɔ̀n dì bed.
3SG.SBJ remove DEF clothing from DEF bed.
'She took the piece of clothing from the bed.' (Pichi, Equatorial Guinea)

(4) è pul dì tin nà pàntap dì bed.
3SG.SBJ remove DEF thing LOC upper.surface DEF bed
'She took the thing from the bed.'

The data can therefore tell us that Pichi has undergone more intense contact with European languages (in this case English and Spanish) than Ndyuka (cf. (1)), next to (continuing) contact with African adstrates. The presence of typologically more "African" versus more "European" locative structures correlates with the presence of more "African" versus "European" features in other domains of the grammar of individual AECs (Yakpo 2012a, 2012b). The hypothesis of contact intensity is also corroborated by socio-historical evidence (cf. e.g. Hoogbergen 1990 for the AECs of Suriname).

In such a way, data from a variety of AECs, as well as African and European languages can be used to disentangle complex contact trajectories in order to account for the structural differentiation of the AEC family since its emergence about three hundred and fifty years ago.

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Evidence for the Source-Goal asymmetry: the case of Ancient Greek preverbs

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As it is well known (cf. among others Kuryłowicz 1964, Baldi 1979), IE preverbs (PV), including Ancient Greek preverbs, derive from earlier local particles occurring in free position in the sentence. In Homeric Greek such local particles are not fully grammaticalized into PVs (cf. among others Watkins 1964, Romagno 2004, Hewson and Bubenik 2006), as they are in later Greek. Interestingly, Homeric PVs seem to show different degrees of grammaticalization, depending on their original spatial meaning: Source-PVs and Goal-PVs exhibit an asymmetry in their diachronic development (Imbert 2008).

On the one hand, PVs encoding originally Source, such as *ek*- 'out of' or *apó*- 'away of', tend to develop telic meanings, as it is shown in examples below:

(1) *apekleláthesthe dè thámbeus*
forget.entirely:IMP.AOR.2PL.MID PTC wonder:GEN
'Forget your wonder completely!' (*Od.*24.394)

(2) *toû pódas exapénizen húdōr d' enekheúato poulù*
DEM.GEN foot:ACC.PL wash.thorougly:IMPF.3SG water:ACC PTC pour.in:AOR.3SG.MID much:ACC
'She washed thoroughly his feet, and poured much water in.' (*Od.*19.387)

As the meaning of such PVs is moving (or has moved) from concrete to aspectual, one can already find in Homer a number of occurrences in which the PV no longer adds deictic meanings to the verbal stem. Thus, the Source needs to be encoded by a prepositional phrase, even in the presence of a PV deriving from a spatial particle encoding Source, as in (3):

(3) *tḕn ek Lurnēssoû exeíleto*
REL.ACC.F out.of L.:GEN carry.off.as.booty:AOR.3SG.MID
'(Briseïs) whom he had taken out of Lyrnessus.'(Il.2.690)

On the other hand, PVs encoding Goal, such as *eis*-/*es*- 'to', generally have undergone a lower degree of grammaticalization. As PVs, they usually retain their spatial meaning and add deictic value to the verbal stem onto which they stack. For this reason, the plain accusative can encode Direction itself in addition to compounds containing at least one Goal-PV, as it is shown in (4):

(4) *hē mèn ár' eisanabâs' huperṓïa sigalóenta*
DEM.NOM.F PTC PTC go.up.to:PTCP.AOR.NOM.F upper.chamber:ACC.PL glittering:ACC.PL
'As she had gone to the glittering upper chambers.' (*Od.*16.449)

My paper aims to discuss whether in Post-Homeric Greek Source-PVs and Goal-PVs, given their different status in Homer, undergo increasing grammaticalization in a non-homogeneous way, the former being more advanced than the latter in the process.

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